

Idaho Transportation Department Efficiency Report — 1994 to 2012 —





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Finding efficiencies—an integral part of ITD's strategic thinking

Over the last 15 years, the Idaho Transportation Department identified and implemented more than 125 innovative and cost-saving efficiencies.

The following pages provide a detailed report on how the department's recent efficiency efforts are making a real difference by:

- improving customer service,
- offsetting the costs of inflation, and
- redirecting savings to our highest priorities.

These efforts helped the department achieve national recognition for having the 10th most cost-efficient highway system in the nation, according to a national report published in June 2007.

While we can be justifiably proud of this progress, there are still significant challenges ahead—challenges that will require fresh thinking and creative solutions.

We recently introduced a new process to simplify the design of construction projects and stretch taxpayer dollars as far as possible. The concept of Practical Design supports the department's long history and culture of innovative, cost-effective solutions. By customizing construction projects to fit specific needs using Practical Design concepts, we can save money that will be used to fund additional projects. For fiscal years FY08 through FY12, the department has identified over \$50 million in savings through the use of practical design methods.

We are working with the Associated General Contractors to simplify and streamline our construction testing and inspection procedures.

We will also begin working soon with our engineering consultants to identify when we should use engineering firms, how to improve the consultant-selection process, and how to better manage projects to deliver them on time and on budget.

For every efficiency example listed in this report, there are even more occurring throughout the department. That's why we can say with pride that we are living our mission of providing a "high-quality, cost-efficient" transportation system that serves our customers—the citizens of Idaho.

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Key Indicators

Idaho Transportation Department

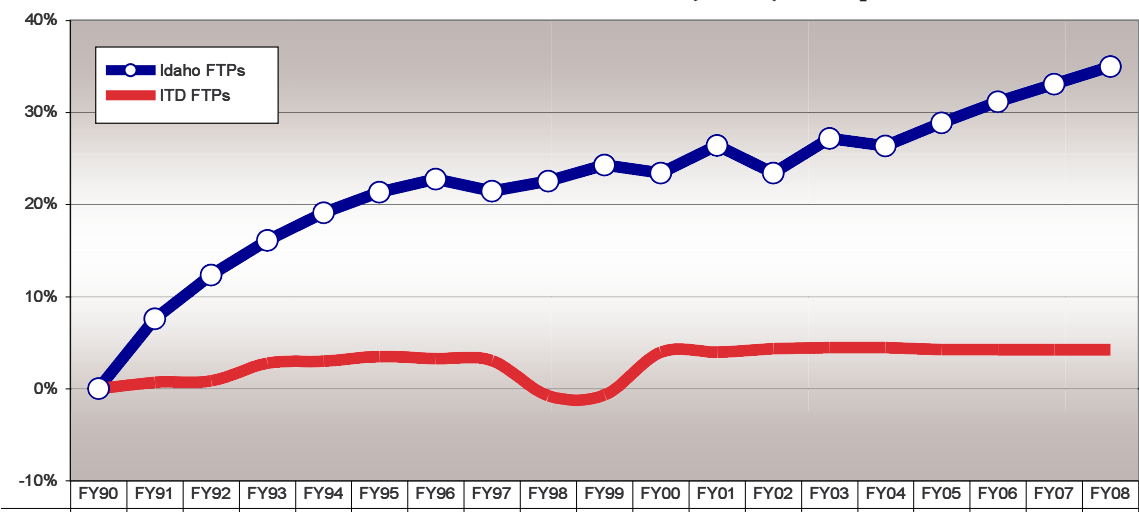
Key Indicators

	FY90	FY96	FY08
Full-Time Positions (FTP)	1,759	1,816	1,833.5
• Division of Highways	1,270	1,389	1,328
• Division of Motor Vehicles	269	169**	239.5**
• Division of Administration	203	200	199
• Division of Transportation Planning and Programming	-	38	45
• Division of Aeronautics	13	12	13
• Division of Public Transportation	3	7	9
• Inter/Intra Department Services	1	1	0
Total Legislative Appropriation (Dollars in millions and rounded)	\$247.9	\$279.7	\$495.7 — \$774.7*
• Division of Highways	\$218.5	\$244.9	\$430.3
• Division of Motor Vehicles	\$11.9	\$10.0	\$18.8
• Division of Administration	\$11.3	\$13.8	\$22.5
• Division of Transportation Planning and Programming	-	\$3.4	\$6.0
• Division of Aeronautics	\$1.4	\$1.4	\$2.9
• Division of Public Transportation	\$1.2	\$3.6	\$9.6
• Capital Facilities	\$2.4	\$1.4	\$5.6
• Inter/Intra Department Services	\$1.2	\$1.2	\$0

*Includes \$250 million in GARVEE projects and \$29 million in GARVEE debt service
 **The Port of Entry program was transferred to the Division of Highways in 1992 and trasferred back to DMV in 1999.

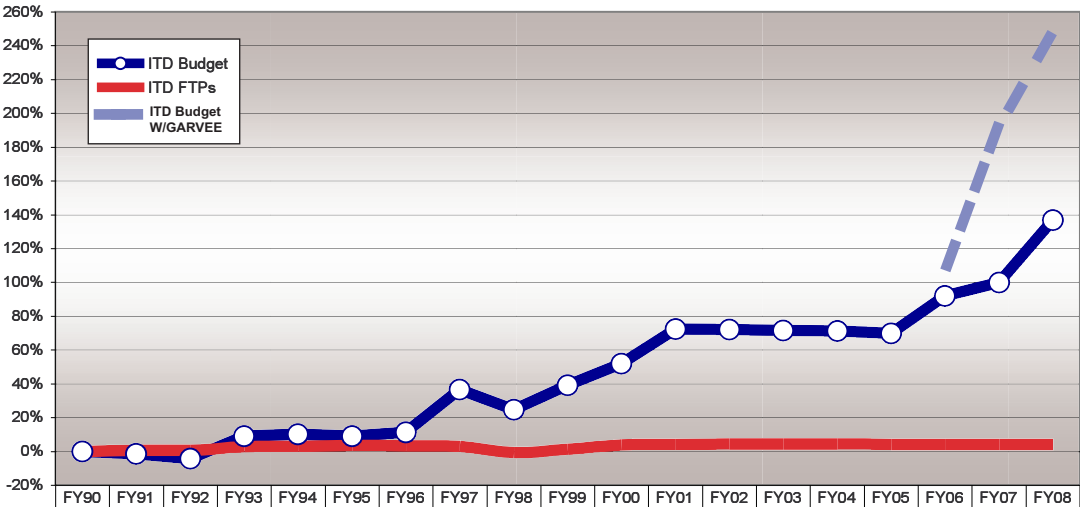
Key Indicators (continued)

State of Idaho Full-Time Positions (FTP) compared to ITD



State FTPs increased 35% since FY90.
ITD's FTPs increased 4.2% during the same time.

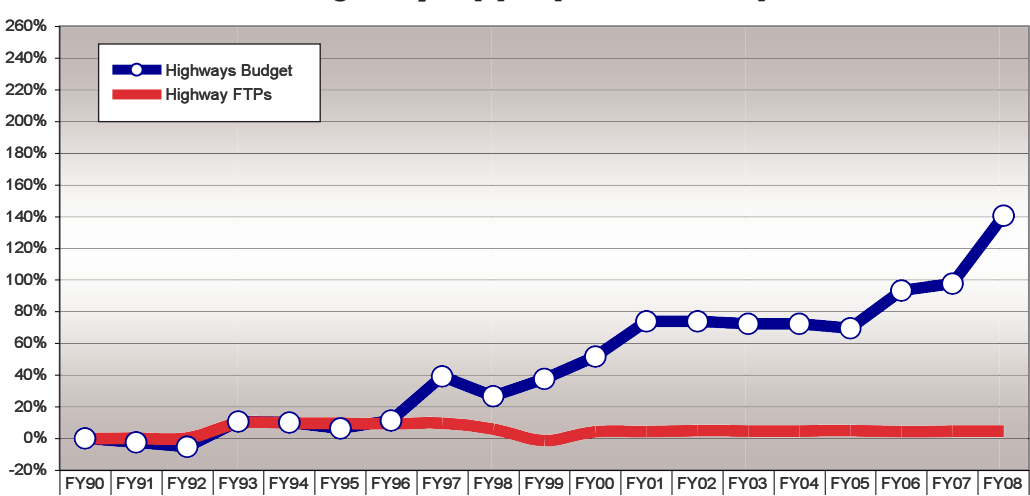
ITD appropriation compared to FTPs



ITD's appropriation* increased 247% since FY90.
ITD's FTPs increased only 4.2% during the same time.

*Includes \$250 million in GARVEE projects and \$29 million in GARVEE debt service

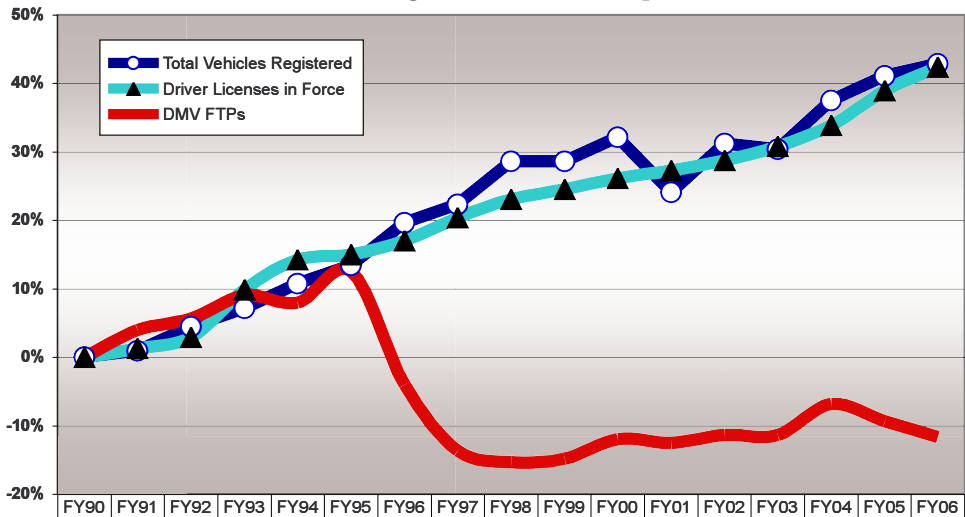
Division of Highways appropriation compared to FTPs



The Division of Highways' appropriation* increased 140% since FY90.
The division's FTPs increased only 4.6% during the same time.

*Includes GARVEE

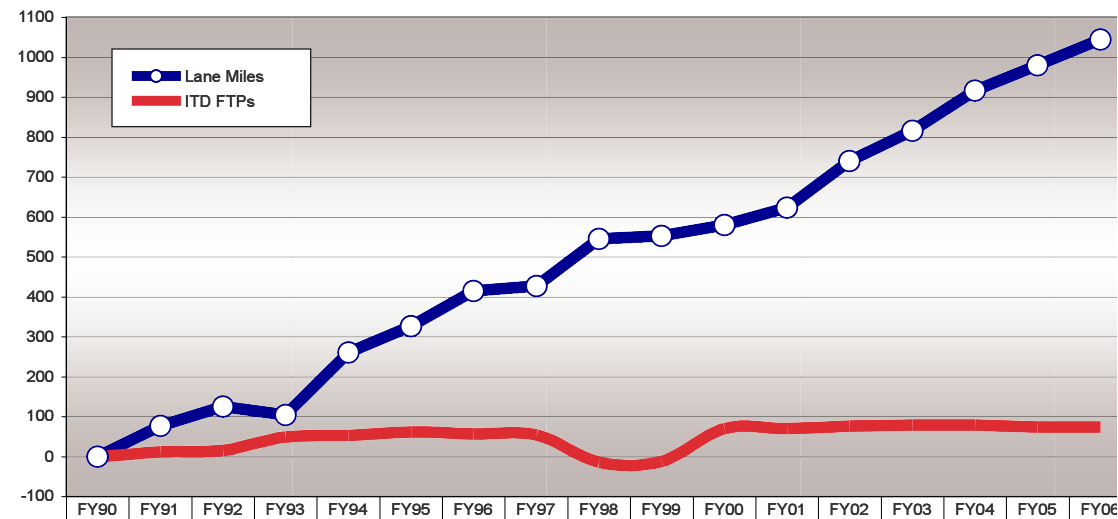
Driver licenses and registrations compared to DMV FTPs



Driver licenses and registrations increased 43% since FY90.
DMV's FTPs (not including POE) decreased 12% during the same time.

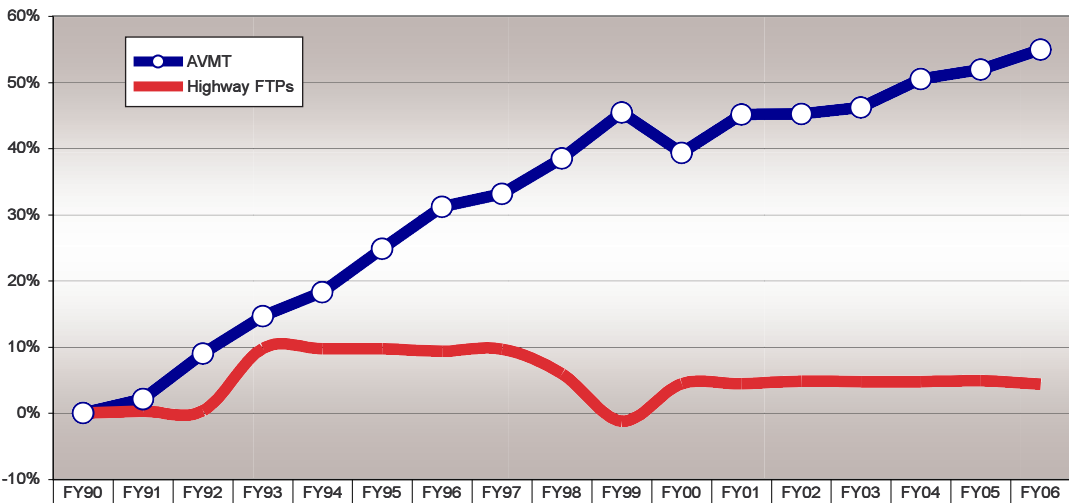
Key Indicators (continued)

Lane mile growth compared to ITD's total FTPs



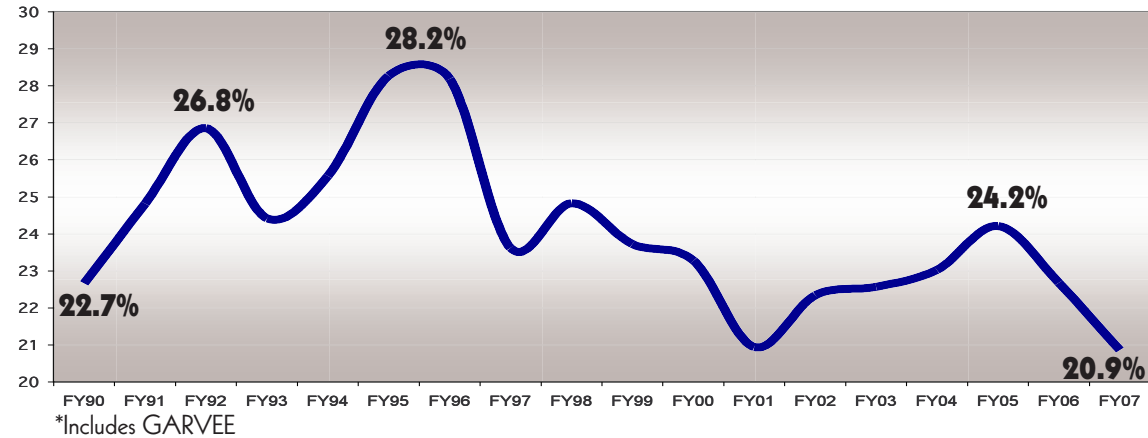
ITD added 1,044 lane miles to the State Highway System since 1990.
ITD added only 75 FTPs during the same time.

Annual Vehicle Miles Traveled (AVMT) compared to highways FTPs



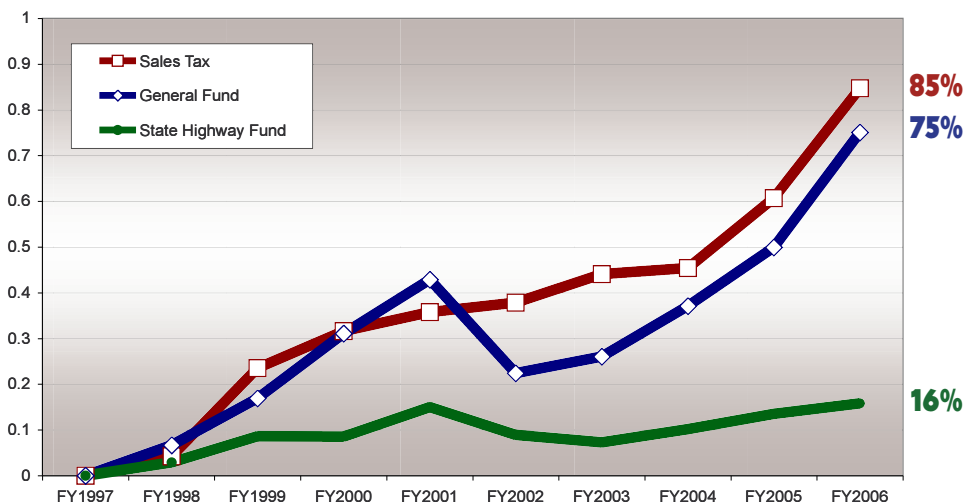
Idaho's total AVMT increased 55% since 1990.
The Division of Highways' FTPs have increased 4.4% during the same time.

Personnel costs as a percentage of total appropriation



ITD's personnel costs as a percentage of total appropriation have dropped
from a high of 28.2% in FY96 to 20.9% in FY07.

Sales tax and the general fund compared to ITD's state revenue



Since 1990, Idaho's sales tax receipts increased 85% and Idaho's General Fund
increased 75%. HDA* revenue to ITD increased only 16% during that same time.

*Highway Distribution Account

Efficiency Measures

2008 Forward

Efficiency Measures

2008 forward — Division of Highways

Practical Design

Phase 1—Initial implementation

The department is implementing Phase 1 of its “Practical Design” initiative to improve the cost-effectiveness of its project designs. Practical Design concepts will help address Idaho’s growing transportation-funding challenges by increasing the innovation, creativity, and flexibility incorporated in design processes. The basic goal is to customize construction projects to fit specific needs rather than using the more expensive “one size fits all” approach.

The Practical Design methods implemented will be sensitive to project locations and appropriate to the context of the surroundings. They will help the department achieve the best value for the least cost. All associated cost savings will be used to increase the funding available for other projects.

The following pages identify over \$50 million in Practical Design savings. Additional savings will be identified as the Practical Design initiative becomes an integral part of the department’s culture.

Total FY08 through FY12 Practical Design Savings:

• District 1	\$6,490,500
• District 2	\$4,207,000
• District 3	\$5,779,000
• District 4	\$8,040,000
• District 5	\$14,435,000
• District 6	<u>\$11,863,000</u>

TOTAL SAVINGS: \$50,814,500

Phase 2—Future implementations

The money- and time-saving concepts of Practical Design are currently being implemented in the department’s design activities. However, as Practical Design becomes a more integral part of the department’s overall culture, it will become an important, required facet of every program.

Rather than applying generic designs and practices across the board, the department will research, develop, and employ the most efficient solutions available in areas such as the Enhancement Program, highway maintenance, pavement markings, facility improvement, project-bidding, etc.

For example, Practical Design methods can save money during the project-bidding process by letting the market determine if it is less expensive to use asphalt for a particular project or concrete, based on current prices. Allowing the market to determine which materials are less expensive will allow contractors to submit lower bids than they can for generic designs with inflexible material requirements.

Safety and structural integrity will remain the department’s highest priorities for the State Highway System—but making efficient use of the department’s limited funds is also a top priority. Employing Practical Design concepts wherever possible will not only save money, it will provide the flexibility to incorporate new technology and practices—allowing the Idaho Transportation Department to continue as one of the most efficient transportation agencies in the nation.



Efficiency Measures

2008 forward — Division of Highways

- Practical Design Definitions:
- BST: Bituminous Surface Treatment
 - CRABS: Cement Recycled Asphalt Base
 - MMA: Methyl Methacrylate (striping paint)
 - SALSA: Stress Absorbing Layer of Straight Asphalt

Practical Design

District 1, FY08 Projects

- I-90, Pavement striping
- District-wide brooming

	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
	\$534,000	\$429,500	Washington state line to Sherman included MMA Paving	\$104,500
	\$500,000	\$400,000	Reduce brooming due to use of salt brine	<u>\$100,000</u>
TOTAL FY08 SAVINGS:				\$204,500
District 1, FY09 Projects				
• U.S. 95, Lincoln Way Interchange	\$5,550,000	\$2,550,000	Reduce scope to deck replacement, no additional lanes	\$3,000,000
• District-wide brooming	\$500,000	\$400,000	Reduce brooming due to use of salt brine	<u>\$100,000</u>
TOTAL FY09 SAVINGS:				\$3,100,000
District 1, FY10 Projects				
• District-wide brooming	\$500,000	\$400,000	Reduce brooming due to use of salt brine	\$100,000
• SH-5, Cottonwood Creek Culvert	\$550,000	\$450,000	Reduce scope to widening only	\$100,000
• SH-57, Gleason Boswell to Lamb Creek	\$2,572,000	\$2,187,000	Reduce pavement thickness	\$385,000
• SH-57, Lamb Creek to Bismark Road	\$3,861,000	\$2,613,000	Reduce pavement thickness	<u>\$1,248,000</u>
TOTAL FY10 SAVINGS:				\$1,833,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design Definitions:

- BST: Bituminous Surface Treatment
- CRABS: Cement Recycled Asphalt Base
- SALSA: Stress Absorbing Layer of Straight Asphalt

Practical Design (continued)

Practical Design (continued)	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
District 1, FY11 Projects				
• District-wide brooming	\$500,000	\$400,000	Reduce brooming due to use of salt brine	\$100,000
• I-90, Pinehurst to Elizabeth Park	\$5,653,000	\$4,500,000	Reduce pavement thickness	<u>\$1,153,000</u>
TOTAL FY11 SAVINGS:				\$1,253,000
District 1, FY12 Projects				
• District-wide brooming	\$500,000	\$400,000	Reduce brooming due to use of salt brine	<u>\$100,000</u>
TOTAL FY12 SAVINGS:				\$100,000
TOTAL DISTRICT 1 SAVINGS:				\$6,490,500

Efficiency Measures

2008 forward — Division of Highways

Practical Design (continued)

District 1, Distribution of Practical Design Savings

	Practical Design Savings	Projects Targeted to Receive Savings and How the Funds Will be Used	Total Project Cost
• FY08	\$204,500	SH-200, Lightening Creek Bridge — Increase scope, new flood stage requirements	\$6,750,000
• FY09	\$3,100,000	SH-200, Lightening Creek Bridge — Increase scope, new flood stage requirements	\$6,750,000
		U.S. 95, Sandpoint North and South — Address inflation	\$122,658,000
• FY10	\$1,833,000	U.S. 95, Sandpoint North and South — Address inflation	\$122,658,000
• FY11	\$1,253,000	U.S. 95, Sandpoint North and South — Address inflation	\$122,658,000
• FY12	<u>\$100,000</u>	U.S. 95, Sandpoint North and South — Address inflation	\$122,658,000
TOTAL SAVINGS TRANSFERRED:	\$6,490,500		

Efficiency Measures

2008 forward — Division of Highways

Practical Design Definitions:

- BST: Bituminous Surface Treatment
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Practical Design (continued)

District 2, FY09 Projects

- U.S. 12, Woodland Road to milepost 70

	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
	\$2,050,000	\$1,940,000	Eliminate retaining wall using curb and gutter	<u>\$110,000</u>
TOTAL FY09 SAVINGS:				\$110,000
District 2, FY10 Projects				
• SH-11, Top of Pierce Pass to Pierce	\$5,540,000	\$4,104,000	Savings from design exception on horizontal alignment	\$1,436,000
• U.S. 95, Top of White Bird Grade	\$3,181,000	\$2,981,000	Design exception for shoulder width, reduce from 5' to 3'	\$200,000
• U.S. 95, Mission Creek to Webb, passing lane	\$4,546,000	\$3,841,000	Design exception for shoulder width, reduce from 5' to 3'	\$705,000
• U.S. 12, Variable message sign	\$893,000	\$175,000	Locations reduced due to the statewide contract	<u>\$718,000</u>
TOTAL FY10 SAVINGS:				\$3,059,000

Efficiency Measures

2008 forward — Division of Highways

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Practical Design (continued)

District 2, FY11 Projects

- U.S. 95, Grangeville to end of concrete
- SH-162, Four Corners to milepost 13.1

	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
	\$4,559,000	\$3,896,000	Change concept from CRABS to mill 0.20'/overlay 0.20'	\$663,000
	\$1,150,000	\$775,000	Reduce plant mix from 0.30' to 0.20' overlay	\$375,000
TOTAL FY11 SAVINGS				\$1,038,000
TOTAL DISTRICT 2 SAVINGS:				\$4,207,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design Definitions:

- SBL: Southbound Lanes
- NBL: Northbound Lanes

Practical Design (continued)

District 2, Distribution of Practical Design Savings

<div> <div>• FY09</div> </div>	Practical Design Savings	Projects Targeted to Receive Savings and How the Funds Will be Used	Total Project Cost
	\$110,000	U.S. 95, Moscow Mountain Passing Lane — Accelerate design and right-of-way to advance project	\$1,820,000
<div> <div>• FY10</div> </div>	\$3,059,000	U.S. 95, Lewiston Hill southbound lanes — Adding pavement rehabilitation section at bottom of hill	\$1,850,000
		U.S. 95, Top of Lewiston Hill to Thorn Creek Road, SBL — Adjust Genesee to Thorn Creek seal coat for inflation	\$600,000
		U.S. 95, Moscow Mountain Passing Lane — Advance from FY12 — Add passing lanes	\$1,820,000
<div> <div>• FY11</div> </div>	\$1,038,000	SH-162, Milepost 13.1 to Thornsprings — New Project: Advance from FY12 — Minor widening and surface rehabilitation	\$1,100,000
<div> <div>• FY12</div> </div>	0	U.S. 95, Top of Lewiston Hill to Thorn Creek Road seal coats — New Project: Seal coat all lanes north of Genesee and NBL south of Genesee — Replaces advanced project	\$1,500,000
TOTAL SAVINGS TRANSFERRED:		\$4,207,000	

Efficiency Measures

2008 forward — Division of Highways

Practical Design Definitions:

- BST: Bituminous Surface Treatment
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- SALSA: Stress Absorbing Layer of Straight Asphalt

Practical Design (continued)

District 3, FY08 Projects

	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
• U.S. 20/26, Corridor preservation, Caldwell to Eagle	\$1,400,000	\$1,270,000	Optimize right-of-way purchases	\$130,000
• SH-55, Main Street, Donnelly	\$1,820,000	\$1,755,000	Reduce width	\$65,000
• SH-51, SH-67 Junction, Mountain Home	\$690,000	\$545,000	Reduce lane width on Elmcrest Street	\$145,000
• SH-69, Kuna to Meridian, corridor plan	\$225,000	\$205,000	Limit study area	\$20,000
• SH-52, Payette to Horseshoe Bend, corridor plan	\$250,000	\$230,000	Limit study area	\$20,000
• U.S. 26, Parma to Caldwell, corridor plan	\$200,000	\$180,000	Limit study area	\$20,000
• SH-19, Wilder to Caldwell, corridor plan	\$200,000	\$180,000	Limit study area	\$20,000
• SH-55, Deinhard Lane to Zachary Road, McCall	\$1,955,000	\$1,682,000	Reduce ballast	\$273,000
• I-84, Leveling course, Cleft to Sebree	\$4,030,000	\$3,774,000	Seal coat from fog line to fog line only	\$256,000
• District traffic study	\$100,000	\$90,000	Limit study area	\$10,000
• District traffic safety study	\$100,000	\$90,000	Utilize new technology	<u>\$10,000</u>
TOTAL FY08 SAVINGS:				\$969,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design Definitions:

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Practical Design (continued)

District 3, FY09 Projects

	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
• Pavement striping	\$290,000	\$266,000	Use durable striping	\$24,000
• SH-16, Floating Feather Road intersection, Eagle	\$430,000	\$395,000	Reduce ballast	\$35,000
• SH-44, Corridor preservation, Junction I-84 to Eagle	\$1,000,000	\$900,000	Optimize right-of-way purchases	\$100,000
• SH-52, Payette River Bridge, Emmett	\$970,000	\$860,000	Rehabilitate deck only	\$110,000
• U.S. 20/26, Corridor preservation, Caldwell to Eagle	\$1,000,000	\$900,000	Optimize right-of-way purchases	\$100,000
• U.S. 95, Payette River Bridge, South of Payette	\$10,930,000	\$8,833,000	Reduce shoulder width	<u>\$2,097,000</u>
TOTAL FY09 SAVINGS:				\$2,466,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design Definitions:

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Practical Design (continued)

District 3, FY10 Projects

- U.S. 20/26, Corridor preservation, Caldwell to Eagle
- SH-44, Corridor preservation, Junction I-84 to Eagle
- SH-55, Gold Dust Road turn bay
- Pavement striping, various locations
- U.S. 95, Fruitland to Payette
- U.S. 30, Snake River Bridge to U.S. 95 Junction, Fruitland
- SH-78, SH-45 Junction to Murphy
- Traffic signal controller replacements
- U.S. 20, Linder Road turnbays

Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
\$1,000,000	\$900,000	Reduce area of study	\$100,000
\$1,000,000	\$900,000	Reduce area of study	\$100,000
\$370,000	\$351,000	Reduce ballast	\$19,000
\$290,000	\$260,000	Replace with durable striping	\$30,000
\$3,210,000	\$3,015,000	Change from CRABS to mill/inlay	\$195,000
\$720,000	\$670,000	Change from CRABS to mill/inlay	\$50,000
\$3,335,000	\$3,075,000	Mill/inlay fogline to fogline	\$260,000
\$65,000	\$59,000	Utilize new technology	\$6,000
\$600,000	\$520,000	Build one turnbay, have developer build the other turnbay	\$80,000
TOTAL FY10 SAVINGS:			\$840,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design Definitions:

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Practical Design (continued)

District 3, FY11 Projects

	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
• U.S. 20/26, Corridor preservation, Caldwell to Boise	\$1,000,000	\$900,000	Optimize right-of-way purchases	\$100,000
• SH-44, Corridor preservation, I-84 Junction to Eagle	\$1,000,000	\$900,000	Optimize right-of-way purchases	\$100,000
• SH-55, Paddy Flat Road to Johnson Lane	\$4,715,000	\$4,215,000	Reduce ballast	\$500,000
• District-wide pavement striping	\$290,000	\$260,000	Replace with durable striping	\$30,000
• SH-21, Diversion Dam to Sandy Point	\$2,070,000	\$1,941,000	Mill/inlay fogline to fogline	\$129,000
• U.S. 95, Oregon state line to milepost 16	\$6,325,000	\$6,150,000	Mill/inlay fogline to fogline	\$175,000
• SH-51, Sheep Creek to Tindall Road	\$3,450,000	\$3,250,000	Mill/inlay fogline to fogline	\$200,000
• SH-44, Old Highway 30 intersection	\$805,000	\$780,000	Reduce side-street pavement width	\$25,000
• SH-44, Traffic signal controller replacement	\$92,000	\$87,000	Utilize new technology	<u>\$5,000</u>
TOTAL FY11 SAVINGS:				\$1,264,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design Definitions:

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Practical Design (continued)

District 3, FY12 Projects

- U.S. 20/26, Corridor preservation, Caldwell to Eagle
- SH-44, Corridor preservation, Junction I-84 to Eagle
- Traffic signal controller replacement
- District-wide bridge repair

Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
\$1,000,000	\$900,000	Optimize right-of-way purchases	\$100,000
\$1,000,000	\$900,000	Optimize right-of-way purchases	\$100,000
\$75,000	\$72,000	Utilize new technology	\$3,000
\$550,000	\$513,000	Utilize new technology and construction techniques	<u>\$37,000</u>
TOTAL FY12 SAVINGS:			\$240,000
TOTAL DISTRICT 3 SAVINGS:			\$5,779,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design (continued)

District 3, Distribution of Practical Design Savings

	Practical Design Savings	Projects Targeted to Receive Savings and How the Funds Will be Used	Total Project Cost
<ul style="list-style-type: none"> FY08 	\$969,000	SH-52, Payette River Bridge, Emmett — Advance from FY09	\$970,000
<ul style="list-style-type: none"> FY09 	\$2,466,000	SH-55, Westbound ramps to Fairview Avenue — Advance from FY10	\$3,280,000
		District-wide preventative maintenance	\$156,000
<ul style="list-style-type: none"> FY10 	\$840,000	SH-21, I-84 to Federal Way — Advance from FY11	\$530,000
		U.S. 95, SH-55 Junction to Homedale — Advance from FY11	\$2,760,000
		SH-72, U.S. 30 Junction to SH-52 Junction — Advance from Fy12	\$748,000
<ul style="list-style-type: none"> FY11 	\$1,264,000	SH-52, Payette east city limits to SH-72 Junction — Advance from Fy12	\$4,485,000
<ul style="list-style-type: none"> FY12 	<u>\$240,000</u>	SH-55, Congestion mitigation — New Project: Add passing lanes	\$5,500,000
TOTAL SAVINGS TRANSFERRED:	\$5,779,000		

Efficiency Measures

2008 forward — Division of Highways

- Practical Design Definitions:
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Practical Design (continued)

District 4, FY08 Projects

- U.S. 30, Twin Falls main canal bridge 322
- U.S. 30, Twin Falls main canal bridge outlet
- U.S. 30, Bliss to Malad River bridge
- SH-25, milepost 18 to I-84 Junction
- I-84, U.S. 93, Junction to SH-50 Interchange

Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
\$1,370,000	\$1,270,000	Companion with outlet bridge Change design so both bridges have the same design Stage construction on both bridges	\$100,000
\$1,273,000	\$1,173,000	Same as above—companion project	\$100,000
\$965,000	\$515,000	Change thin overlay to double seal coat	\$450,000
\$4,061,000	\$3,911,000	Change CRABS design to mill/overlay	\$150,000
\$1,725,000	\$1,585,000	Change traffic control to daylight Short-term lane closures Delete profilograph from surface texture specification	<u>\$140,000</u>
TOTAL FY08 SAVINGS:			\$940,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design Definitions:

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Practical Design (continued)

District 4, FY09 Projects

- SH-75, Shoshone North

- I-84, Declo to Salt Lake Interchange

- I-84, Burley to Declo

- U.S. 93, Jim Byrne Slough to Pagari

	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
• SH-75, Shoshone North	\$12,556,000	\$12,056,000	Reduce scope from four-lane section to a two-lane section Build two-lane bridges instead of four-lane bridges Acquire right-of-way for full-build of four-lane section	\$500,000
• I-84, Declo to Salt Lake Interchange	\$14,287,000	\$13,487,000	Apply CRABS on travel-lanes only Use recycled asphalt base to ballast shoulders on lower lift	\$800,000
• I-84, Burley to Declo	\$20,500,000	\$19,300,000	Apply CRABS on travel lanes only Use recycled asphalt base to ballast shoulders on lower lift	\$1,200,000
• U.S. 93, Jim Byrne Slough to Pagari	\$4,552,000	\$4,302,000	Reduce grade of asphalt Narrow shoulders Apply CRABS on travel lanes only	<u>\$250,000</u>
TOTAL FY09 SAVINGS:				\$2,750,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design Definitions:

- BST: Bituminous Surface Treatment
- CRABS: Cement Recycled Asphalt Base
- SALSA: Stress Absorbing Layer of Straight Asphalt

Practical Design (continued)

District 4, FY10 Projects

- I-86, Salt Lake Interchange to Raft River, eastbound
- I-84B, North Overland, Burley
- I-84, King Hill Interchange to West Bliss Interchange

Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
\$15,500,000	\$14,700,000	Apply CRABS on travel lanes only Use recycled asphalt base to ballast shoulders on lower lift	\$800,000
\$6,750,000	\$6,450,000	Use recycled asphalt for base	\$300,000
\$17,009,000	\$16,109,000	Apply CRABS on travel lanes only Use recycled asphalt base to ballast shoulders on lower lift	<u>\$900,000</u>
			\$2,000,000
\$2,919,000	\$2,819,000	Change grade of asphalt	\$100,000
\$11,500,000	\$10,850,000	Apply CRABS on travel lanes only Use recycled asphalt base to ballast shoulders on lower lift	<u>\$650,000</u>
			\$750,000
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Efficiency Measures

2008 forward — Division of Highways

- Practical Design Definitions:
- BST: Bituminous Surface Treatment
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Practical Design (continued)

District 4, FY12 Projects

SH-75, Timberway to Hospital Drive

I-86, Salt Lake Interchange to Raft River, westbound

	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
SH-75, Timberway to Hospital Drive	\$28,158,000	\$27,158,000	More accurate pavement thickness	\$1,000,000
I-86, Salt Lake Interchange to Raft River, westbound	\$13,855,000	\$13,255,000	Apply CRABS on travel lanes only Use recycled asphalt base to ballast shoulders on lower lift	<u>\$600,000</u>
TOTAL FY12 SAVINGS:				\$1,600,000
TOTAL DISTRICT 4 SAVINGS:				\$8,040,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design (continued)

District 4, Distribution of Practical Design Savings

• FY08

• FY09

• FY10

• FY11

• FY12

	Practical Design Savings	Projects Targeted to Receive Savings and How the Funds Will be Used	Total Project Cost
	\$969,000	New Project: District-wide seal coats	\$940,000
	\$2,750,000	SH-75, Gannet Road to Silver Creek Bridge — Advance from FY12	\$4,400,000
	\$2,000,000	SH-75, Gannet Road to Silver Creek Bridge — Adjust project cost for inflation	\$4,400,000
		New Project: District-wide seal coats	\$350,000
	\$750,000	SH-75, Bellevue South — New Project: Address pavement deficiencies	\$2,400,000
	<u>\$1,600,000</u>	SH-75, Bellevue South — New Project: Address pavement deficiencies	\$2,400,000
		SH-25, Paul to Rupert — New Project: Address pavement deficiencies	\$3,000,000
TOTAL SAVINGS TRANSFERRED:	\$8,040,000		

Efficiency Measures

2008 forward — Division of Highways

- Practical Design Definitions:
- BST: Bituminous Surface Treatment
 - CRABS: Cement Recycled Asphalt Base
 - SALSA: Stress Absorbing Layer of Straight Asphalt

Practical Design (continued)

District 5, FY09 Projects

- U.S. 30, 5th North to Soda Springs north city limits

- I-15, South 5th Interchange to Chubbuck Road, Phase 1

- I-15, South 5th Interchange to Chubbuck Road, Phase 2

- I-86, East American Falls Interchange Bridge

- U.S. 30, Soda Springs east city limits to Nounan Road

- SH-36, Junction SH-34 to milepost 5.0

- U.S. 91, 1st. East to 800 North

- SH-34, Junction U.S. 91 to Riverdale Road

- SH-61, Wyoming state line to U.S. 89 Junction

Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
\$478,000	\$411,000	Rehabilitate travel lanes only	\$67,000
\$5,775,000	\$3,605,000	Rehabilitate travel lanes only	\$2,170,000
\$1,260,000	\$992,000	Seal coat from fog line to fog line only	\$268,000
\$1,600,000	\$1,590,000	Seal coat from fog line to fog line only	\$10,000
\$1,627,000	\$1,315,000	Seal coat from fog line to fog line only	\$312,000
\$420,000	\$413,000	Seal coat from fog line to fog line only	\$7,000
\$263,000	\$121,000	Seal coat from fog line to fog line only Standard seal coat only	\$142,000
\$328,000	\$266,000	Seal coat from fog line to fog line only	\$62,000
\$64,000	\$54,000	Seal coat from fog line to fog line only	\$10,000
TOTAL FY09 SAVINGS:			\$3,048,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design Definitions:

- BST: Bituminous Surface Treatment
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- SALSA: Stress Absorbing Layer of Straight Asphalt

Practical Design (continued)

District 5, FY10 Projects

	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
• I-15, Burns Road Overpass to Sand Road Underpass	\$4,200,000	\$2,653,000	Rehabilitate travel lanes only	\$1,547,000
• SH-36, 5600 West Road to Bear River Bridge	\$1,060,000	\$992,000	Seal coat from fog line to fog line only	\$68,000
• SH-36, Pole Canyon Road to U.S. 89 Junction	\$713,000	\$691,000	Seal coat from fog line to fog line only	\$22,000
• I-15, Utah state line to Deep Creek Interchange	\$1,969,000	\$1,288,000	Seal coat from fog line to fog line only	\$681,000
• SH-40, I-15 Junction to U.S. 91 Junction	\$268,000	\$228,000	Seal coat from fog line to fog line only	\$40,000
• I-15, Utah state line to Ovid	\$1,056,000	\$823,000	Seal coat from fog line to fog line only	\$233,000
• I-15, Devil Creek Interchange to Downey Interchange	\$1,055,000	\$665,000	Seal coat from fog line to fog line only	\$390,000
• U.S. 30, Dingle Road turnout, Bear Lake	\$2,990,000	\$990,000	Seal coat from fog line to fog line only Rehabilitate travel lanes only Less expensive rehab strategy with lower nominal design life ITD standard seal coat	\$2,000,000
• U.S. 30, Pegram Road to Alton Road, Bear Lake	\$1,840,000	\$1,794,000	Seal coat from fog line to fog line only	\$46,000
• I-15, Deep Creek Interchange to Devil Creek Interchange	\$2,990,000	\$2,115,000	Seal coat from fog line to fog line only	\$875,000
TOTAL FY10 SAVINGS:				\$5,902,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design Definitions:

- BST: Bituminous Surface Treatment
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Practical Design (continued)

District 5, FY11 Projects

	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
• U.S. 91, Hurley Drive to Lou Drive	\$80,000	\$31,000	ITD standard seal coat	\$49,000
• I-15B, Blackfoot to Bridge Street south city limits	\$390,000	\$110,000	Seal coat from fog line to fog line only ITD standard seal coat	\$280,000
• I-15B, Main Street to West Blackfoot	\$330,000	\$107,000	Seal coat from fog line to fog line only ITD standard seal coat	\$223,000
• U.S. 91, Bridge Street to Wooten Way	\$360,000	\$104,000	Seal coat from fog line to fog line only ITD standard seal coat	\$256,000
• I-15, Chubbuck Road Underpass north	\$380,000	\$241,000	Seal coat from fog line to fog line only	\$139,000
• I-15, West Bridge Street Interchange to lava beds	\$960,000	\$632,000	Seal coat from fog line to fog line only	\$328,000
• U.S. 30, McCammon Interchange to Crystal Road	\$250,000	\$195,000	Seal coat from fog line to fog line only	\$55,000
• SH-34, Riverdale Road to 4800 North Road	\$60,000	\$39,000	Seal coat from fog line to fog line only	\$21,000
• SH-34, Hooper Avenue 3rd. East	\$325,000	\$113,000	Seal coat from fog line to fog line only ITD standard seal coat	\$212,000
• I-15, Malad Interchange to Malad west city limits	\$200,000	\$54,000	Seal coat from fog line to fog line only ITD standard seal coat	\$146,000
• I-86B, Idaho Street to milepost 0.00	\$120,000	\$92,000	Seal coat from fog line to fog line only	\$28,000
• SH-39, Sterling Road to Hoff Road	\$1,240,000	\$924,000	Seal coat from fog line to fog line only	\$316,000
TOTAL FY11 SAVINGS:				\$2,053,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design Definitions:

- BST: Bituminous Surface Treatment
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Practical Design (continued)

District 5, FY12 Projects

	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
• I-15, Virginia Interchange to McCammon Interchange	\$1,510,000	\$1,079,000	Seal coat from fog line to fog line only	\$431,000
• U.S. 26, INL Junction to West Blackfoot	\$1,750,000	\$1,252,000	Seal coat from fog line to fog line only	\$498,000
• I-86, West Pocatello Interchange to Power County line	\$90,000	\$70,000	Seal coat from fog line to fog line only	\$20,000
• U.S. 30B, U.S. 30 Junction to U.S. 30 Junction	\$70,000	\$25,000	Seal coat from fog line to fog line only ITD standard seal coat	\$45,000
• SH-34, Treasureton Road to WMS Canal	\$350,000	\$287,000	Seal coat from fog line to fog line only	\$63,000
• SH-34, Niter Bench Road to U.S. 30 Junction	\$630,000	\$424,000	Seal coat from fog line to fog line only	\$206,000
• SH-36, Preston west city limits to U.S. 91 Junction	\$260,000	\$79,000	Seal coat from fog line to fog line only ITD standard seal coat	\$181,000
• I-15, Downey Interchange to U.S. 91 Junction	\$150,000	\$110,000	Seal coat from fog line to fog line only	\$40,000
• I-86, Rockland Interchange to IGO	\$1,230,000	\$836,000	Seal coat from fog line to fog line only	\$394,000
• I-86, IGO Interchange to Chubbuck Interchange	\$2,280,000	\$1,623,000	Seal coat from fog line to fog line only	\$657,000
• I-86, Chubbuck Interchange to I-15 Junction	\$230,000	\$175,000	Seal coat from fog line to fog line only	\$55,000
• U.S. 89, U.S. 30 Junction to 1st Street Montpelier	\$120,000	\$36,000	Seal coat from fog line to fog line only ITD standard seal coat	\$84,000
• U.S. 91, 800 North Street to Downata pools	\$1,690,000	\$1,278,000	Seal coat from fog line to fog line only	\$412,000
• U.S. 91, Blackfoot North to Bonneville Lane	\$970,000	\$758,000	Seal coat from fog line to fog line only	\$212,000
• U.S. 30, Montpelier south city limits to milepost 438.6	\$170,000	\$122,000	Seal coat from fog line to fog line only	\$48,000
• U.S. 30, Turnout to Pegram Road	\$270,000	\$205,000	Seal coat from fog line to fog line only	\$65,000
• U.S. 30, Thomas Flats to Wyoming state line	\$100,000	\$79,000	Seal coat from fog line to fog line only	<u>\$21,000</u>
TOTAL FY12 SAVINGS:				\$3,432,000
TOTAL DISTRICT 5 SAVINGS:				\$14,435,000

Efficiency Measures

2008 forward — Division of Highways

Practical Design (continued)

District 5, Distribution of Practical Design Savings

	Practical Design Savings	Projects Targeted to Receive Savings and How the Funds Will be Used	Total Project Cost
• FY09	\$3,048,000	U.S. 30, Lund to Hegstrom Road — Increase Project Scope: Widen from two to four lanes	\$9,120,000
• FY10	\$5,902,000	U.S. 30, Lund to Hegstrom Road — Increase Project Scope: Widen from two to four lanes U.S. 30, Hetgstrom Road to Alexander — Increase Project Scope: Widen from two to four lanes	\$9,120,000 \$9,120,000
• FY11	\$2,053,000	U.S. 30, Hetgstrom Road to Alexander — Increase Project Scope: Widen from two to four lanes	\$9,120,000
• FY12	\$3,432,000	U.S. 30/I-15, McCammon Interchange — New Project: Construct new new bridge ramps U.S. 89, Utah state line to Montpelier — New Project: Add turning and passing lanes	\$2,300,000 \$1,853,000
TOTAL SAVINGS TRANSFERRED:	\$14,435,000		

Efficiency Measures

2008 forward — Division of Highways

- Practical Design Definitions:
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Practical Design (continued)

District 6, FY08 Projects

- U.S. 20, Rigby North and South

- U.S. 93, Doublesprings Road, South

- U.S. 26, Granite Hill to Swan Valley Bridge

- U.S. 26, Junction to Bonneville county line

- SH-48, Rigby to Ririe

- District-wide seal coats

TOTAL FY08 SAVINGS:

Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
\$10,114,000	\$9,239,000	Seal coat from fog line to fog line only Use lower asphalt grade and state force striping State supplied and installed concrete median barriers Companion with Idaho Canal and Snake River Canal bridges Eliminate crossovers and construct under traffic Retain crash attenuators	\$875,000
\$3,068,000	\$2,728,000	Seal coat from fog line to fog line only Use lower asphalt grade Eliminate Superpave Modify SALSA to crack seal and overlay	\$340,000
\$2,656,000	\$2,156,000	Seal coat from fog line to fog line only Eliminate Superpave Modify CRABS to crack seal and overlay	\$500,000
\$6,230,000	\$5,655,000	Use fly ash or lime in CRABS instead of cement Seal coat from fog line to fog line only Reduce overlay thickness State force striping	\$575,000
\$2,808,000	\$993,000	Remove curb and gutter section through Rigby Modify leveling course and overlay State force striping	\$1,215,000
\$550,000	\$535,000	State force striping	<u>\$15,000</u>
			\$3,520,000

Efficiency Measures

2008 forward — Division of Highways

- Practical Design Definitions:
- BST: Bituminous Surface Treatment
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 - SALSA: Stress Absorbing Layer of Straight Asphalt

Practical Design (continued)

District 6, FY09 Projects

- U.S. 26, Idaho Falls to Ririe

- U.S. 20, Menan-Lorenzo Interchange

- SH-33, 800 East Road to SH-28 Junction

- U.S. 20, Milepost 20 to Junction U.S. 20/26 West

Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
\$26,958,000	\$23,878,000	Seal coat from fog line to fog line only Recycle the existing plant mix and base Reduce median and shoulder widths State force striping	\$3,080,000
\$12,780,000	\$12,005,000	Seal coat from fog line to fog line only Reduce ballast section Reduce plant mix depth Reduce shoulder width State force striping Build county roads to match existing widths and standards	\$775,000
\$2,235,000	\$2,025,000	Seal coat from fog line to fog line only State force striping Modify CRABS to crack seal and overlay	\$210,000
\$7,484,000	\$6,909,000	Use fly ash or lime in CRABS instead of cement Seal coat from fog line to fog line only Reduce overlay thickness State force striping	<u>\$575,000</u>
TOTAL FY09 SAVINGS:			\$4,640,000

Efficiency Measures

2008 forward — Division of Highways

- Practical Design Definitions:
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Practical Design (continued)

District 6, FY10 Projects

I-15, Dubois Rest Area reconstruction

	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
	\$6,782,000	\$5,774,000	More conservative structure	<u>\$1,008,000</u>
TOTAL FY10 SAVINGS:				\$1,008,000
District 6, FY11 Projects				
SH-33, Driggs Main Street improvements	\$4,392,000	\$3,907,000	More conservative sidewalk width and landscaping	<u>\$485,000</u>
TOTAL FY11 SAVINGS:				\$485,000

Efficiency Measures

2008 forward — Division of Highways

- Practical Design Definitions:
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 - SALSA: Stress Absorbing Layer of Straight Asphalt
 - SBL: Southbound Lanes
 - NBL: Northbound Lanes

Practical Design (continued)

District 6, FY12 Projects

- Pancheri Drive Underpass, Idaho Falls

- I-15, Osgood Interchange to Roberts Interchange, SBL

- I-15, Sage Junction Interchange to Hamer Interchange, NBL

- SH-33, Sage Junction Interchange to Henry's Fork Bridge

- U.S. 20B, St Anthony city streets

- U.S. 26, Lincoln Road to SH-43 Junction, Idaho Falls

- U.S. 26, Clark Hill to Granite Hill

	Initial Project Cost	Revised Project Cost	Design Method Used To Obtain Savings	Total Savings
	\$11,000,000	\$9,675,000	Eliminate Superpave Use Class 22 concrete where appropriate Reduce shoulder widths Reduce median and sidewalk widths Narrower bridge width Local agency striping	\$1,325,000
• I-15, Osgood Interchange to Roberts Interchange, SBL	\$1,800,000	\$1,690,000	Seal coat from fog line to fog line only State force striping	\$110,000
• I-15, Sage Junction Interchange to Hamer Interchange, NBL	\$1,700,000	\$1,600,000	Seal coat from fog line to fog line only State force striping	\$100,000
• SH-33, Sage Junction Interchange to Henry's Fork Bridge	\$2,900,000	\$2,620,000	Seal coat from fog line to fog line only State force striping Eliminate Superpave	\$280,000
• U.S. 20B, St Anthony city streets	\$1,600,000	\$1,495,000	Eliminate Superpave State force striping	\$105,000
• U.S. 26, Lincoln Road to SH-43 Junction, Idaho Falls	\$2,200,000	\$1,985,000	Eliminate Superpave State force striping	\$215,000
• U.S. 26, Clark Hill to Granite Hill	\$3,016,000	\$2,941,000	Seal coat from fog line to fog line only and State force striping	\$75,000
TOTAL FY12 SAVINGS:				\$2,210,000
TOTAL DISTRICT 6 SAVINGS:				\$11,863,000

Efficiency Measures

2008 forward — Division of Highways

Definitions:
• EB: East Bound

Practical Design (continued)

District 6, Distribution of Practical Design Savings

	Practical Design Savings	Projects Targeted to Receive Savings and How the Funds Will be Used	Total Project Cost
• FY08	\$3,520,000	SH-33, 800 North to SH-28 Junction — Advance from FY09, rehabilitate pavement	\$2,025,000
• FY09	\$4,640,000	District-wide seal coats	\$2,045,000
		SH-28, Salmon to Baker — New Project: Rehabilitate pavement	\$1,800,000
		U.S. 20, Madison to EB St. Anthony offramp — New Project: Advance from Horizons	\$960,000
		— Rehabilitate pavement	
		U.S. 20/26/I-15, Bellin Rd. to Yellowstone Hwy. — New Project: Rehabilitate pavement	\$1,815,000
		U.S. 20, SH-47, Ashton city streets — New Project: Rehabilitate pavement	\$517,000
		U.S. 20B, St. Anthony city streets — Rehabilitate pavement	\$1,600,000
		Increase district-wide seal coats	\$5,713,000
• FY10	\$1,008,000	Increase district-wide seal coats	\$5,713,000
• FY11	\$485,000	Increase district-wide seal coats	\$5,713,000
• FY12	\$2,210,000	Increase district-wide seal coats	\$5,713,000
		U.S. 93, Mackay to sportsman’s access — New Project: Rehabilitate pavement	\$1,800,000
		SH-33, Salem Road to Sugar City — New Project: Rehabilitate pavement	\$1,173,000
TOTAL SAVINGS TRANSFERRED:	\$11,863,000		

Efficiency Measures

2008 forward — Division of Highways

Materials and Testing Specifications

The department is working with its private-sector partners to identify potential efficiency improvements to its materials and testing specifications.

① Required testing of drain pipes during installation reduced to one test per every 200 feet

Backfill for drain pipes are currently required to be tested at a ratio of one test per 100 feet. This requirement was implemented when compaction equipment and methods were not as effective or efficient as the equipment currently in use. This measure will relax the pipe requirement to one test per 200 feet.

② Aggregate strength requirements now to be based on use

The aggregate strength requirement is currently the same statewide, regardless of the use. Not all aggregate sources can produce aggregates that meet the requirement, which increases bid prices due to the distances aggregate must be transported. This measure will adjust the requirement for aggregate strength based on the use, which will make more aggregate sources available.

③ Paperwork required for the installation of light and sign posts to be reduced

The paperwork currently required for the certification of light and signal posts is more complicated than is necessary. This measure will reduce the amount of paperwork required to certify the posts and provide more inspector training.

④ Quality Assurance Manual to be simplified and improved

The Quality Assurance Manual is overly complicated and difficult to use. This measure will simplify the manual and include the requirements in the contract itself.

⑤ Asphalt plant mix requirements for non-structural uses to be lowered

The current specifications for the asphalt plant mix used in guardrail installations is based on roadway specifications, and is too restrictive, as most commercial plant mix is adequate for non-structural applications. This measure will relax the requirement, reduce testing, and lower costs.

— Result of Efficiency Measure —

Labor Savings, Cost Reduction

Lower Bid Prices, More Material Sources Available

Paperwork Reduction, Labor Savings

Efficiency Improvement, Customer Service Improvement

Labor Savings, Lower Bid Prices

Efficiency Measures

2008 forward — Division of Highways

Materials and Testing Specifications (continued)

- ⑥ **Gradation testing for embankment material reduced to one test for every 5,000 cubic yards**
The current specifications for testing granular borrow material used in embankments requires repeated testing of the material. This measure would reduce the testing requirements by half to one test for every 5,000 cubic yards of material.
- ⑦ **Pay for Superpave compaction based on "quality," not gradation**
Contractors are currently paid for Superpave plant mix based on gradation, asphalt content, and density. This measure would begin a transition to paying contractors based on the quality characteristics of Superpave rather than prescriptive specifications.
- ⑧ **Subgrade density testing reduced to one test for every 5,000 square yards**
The current specifications for testing the natural ground under embankments are excessive, overly labor intensive, and exceed the requirements of surrounding states. This measure will lower the frequency of subgrade testing by more than half based on the project engineer's assessment and the variability of soils.
- ⑨ **Return pulverized roadbed material testing to documented, visual testing**
The verification of pulverized roadbed material has evolved over time from a visual inspection to a materials testing inspection, which is unnecessary. This measure would return to the requirement of performing only one test then documented with visual inspections.
- ⑩ **Superpave testing frequency reduced to two tests per shift by the state**
Current specifications require Superpave to be tested by the state every 1,500 tons of material. This measure will reduce the testing frequency to a maximum of two tests per shift.
- ⑪ **Magnesium chloride used for dust abatement testing to be clarified**
The manual for magnesium chloride used for dust abatement is unclear. Acceptance requirements for magnesium chloride will show testing or certification, not both.

— Result of Efficiency Measure —	
	Labor Savings, Cost Reduction
	Higher Quality, Lower Bid Prices
	Labor Savings, Cost Reduction
	Labor Savings, Cost Reduction
	Labor Savings, Cost Reduction
	Labor Savings, Cost Reduction

Efficiency Measures

2008 forward — Division of Highways

Materials and Testing Specifications (continued)

- 12

Superpave aggregate testing to be performed only at test strip
Superpave aggregates are currently required to be tested for angularity, flatness, elongation, and fracturability at the test strip and during production paving. This measure will eliminate the required testing during production paving.
- 13

Superpave mix confirmation tests now optional for temporary, non-structural, or small projects
Superpave mix confirmation testing is currently required for all designs. This measure will make the testing optional for plant mix used for temporary or non-structural applications, or for roads designed to receive less than one million single-axle-loads.
- 14

Concrete aggregate specifications to be adjusted, allowing up to a 20% reduction in cement
Current specifications do not take advantage of new technology which can optimize aggregate size. This measure will result in the development of new specifications to incorporate new engineering principles.
- 15

Statistical acceptance of concrete paving to be incorporated into specifications
Concrete paving is currently accepted by prescriptive testing. Statistical acceptance would allow end-result quality testing, reducing costs through innovation.
- 16

Lab testing no longer to be required for non-optimized concrete pavement mixes
Mixes are currently required to be confirmed in a lab. This measure would create specifications to allow documented confirmation for optimized mixes, removing the lab requirement for mix verifications.
- 17

Testing tolerance ranges to be added for structural concrete air content
Current testing specifications do not allow a testing tolerance for air content. This measure will add a tolerance range to the test results, which will lower the amount of concrete rejected due to testing variations.

— Result of Efficiency Measure —
Labor Savings, Cost Reduction
Labor Savings, Cost Reduction
Cost Reduction
Cost Reduction
Reduced Testing, Labor Savings, Cost Reduction
Cost Reduction

Efficiency Measures

2008 forward — Division of Highways

Materials and Testing Specifications (continued)

- 18

Maximum concrete temperatures during placement to be increased to 85 degrees
The maximum temperature for concrete during placement is currently 80 degrees. This measure would increase the maximum temperature allowed to 85 degrees for structural concrete.
- 19

High-water range reducers to be allowed at a maximum water/cement ratio
High-range water reducers are currently allowed with restrictions on water/cement ratio and mix gradations. This measure will allow high-range water reducers at the maximum water/cement ratio without the gradation requirements reducing the number of concrete mix designs, simplifying specifications and allowing greater contractor flexibility.
- 20

Gradation and sand equivalency tests for structural concrete reduced to once every 1,000 cubic yards
Gradation and sand equivalency tests are currently required once every 300 cubic yards. This measure will lower that requirement to once every 1,000 cubic yards.
- 21

Gradation and sand equivalency tests for concrete paving reduced to once every 1,000 cubic yards
Gradation and sand equivalency tests are currently required once every 670 cubic yards. This measure will lower that requirement to once every 1,000 cubic yards.
- 22

Superpave samples may be taken at the plant after the test strip is completed
All plant mix is currently sampled from the roadway. This measure will allow Superpave to also be tested at the plant after the test strip is completed.
- 23

Self-consolidating concrete to be allowed in design specifications
Self-consolidating concrete is not currently authorized by the standard specification manual. This measure will update the manual to allow the use of new self-consolidating concrete technology.

— Result of Efficiency Measure —	
	Fewer Loads Rejected, Cost Reduction
	Simplify Specifications, Increased Flexibility for Contractors
	Labor Savings, Cost Reduction
	Labor Savings, Cost Reduction
	Increased Road Smoothness and Quality
	Lower Costs, Labor Savings, Increased Efficiency and Quality

Efficiency Measures

2008 forward — Division of Highways

Materials and Testing Specifications (continued)

- 24

Volumetric testing of Superpave no longer required on low-volume roads
Volumetric testing of superpave is currently required for all projects. This measure will eliminate the volumetric testing requirement during production for Superpave on low-volume roads.
- 25

Aggregate quality for Superpave to be lowered on low-volume roads
Specified aggregate qualities for Superpave is currently the same for all projects. This measure will reduce the aggregate quality requirements for low-volume roads.

— Result of Efficiency Measure —
Reduced Testing, Cost Reduction
Lower Costs, More Aggregates Sources Made Available

Efficiency Measures

2008 forward — Division of Highways

Future Materials and Testing Specifications Under Consideration

① **Portland Cement requirements, specifications, testing, and certification**

Research the requirements, specifications, testing, and certification of Portland Cement Concrete for use in Idaho. This will include optimizing aggregate gradation, reviewing admixture use for durability issues, and acceptance and testing of constituent materials (cement, fly ash, aggregate, etc.) This research will be conducted at the Idaho State University and will target quality and economical applications.

② **Qualified Product Listing (QPL) Program**

Review the QPL Program to identify improvements that can be implemented to streamline the program and improve its ease of use. The review will also include researching the QPL programs of surrounding states to identify products for possible inclusion in Idaho’s program.

③ **Slump testing for quality-control**

Research the possibility of changing slump testing from an “acceptance criteria” to a quality-control test for workability, placeability, and consistency. Concrete slump tests are a better indicator of material behavior than as an indicator of final quality. Specifications will be developed in cooperation with the concrete suppliers to use unit weight as an indicator of quality.

— Result of Efficiency Measure —	
	Quality Improvement Cost Reduction
	Process Improvement
	Quality Improvement

Efficiency Measures

2008 forward — Division of Highways

❶ **Snowplow simulator will help decrease accidents and increase efficiency**

Safely driving a snowplow requires skill. Maneuvering 30 tons of equipment through blizzards, traffic and on challenging highways is difficult. From 2001 to 2006, the transportation department experienced 169 snowplow accidents at a cost of more than \$300,000. A vast majority of the accidents involved drivers with less than five years experience. That's why the department is following the lead of several other states in purchasing a snowplow simulator to train its new drivers and reduce accidents. Based on other's state's experiences, it is estimated the department will save \$61,000 annually through accident reductions, fuel efficiency and equipment wear. Employees will begin training with the simulator for the 2008-09 winter season.

— Result of Efficiency Measure —

\$61,000 One-Time Savings

Efficiency Measures

2008 forward — Division of Motor Vehicles

① New personal computers will replace old DMV workstations at county offices statewide—increasing reliability and reducing lines

New personal computers that are more reliable and substantially faster will replace outdated workstations allowing county offices to better serve customers. The computers' operating system also increases security for the DMV data.

② On-line driver license reinstatement improves customer service and safety

The introduction of the next on-line DMV service, driver license reinstatements, will improve customer service and safety and remove the need to create a new position to handle the expanding workload. Customers will be able to reinstate driver licenses when eligible without phoning or traveling to a DMV office. Eligible subscribers will also be able to tell if an employee who needs to drive as part of a job requirement has a valid driver license.

③ Border enhancement tools will increase national security—ability to monitor international truck traffic

Two automated "virtual" ports of entry will be established on southbound highways in Boundary County. The federally funded project captures weight and other information about the trucks as well as a photo allowing the department and Idaho State Police to insure international trucks are operating within the law and safely. It also removes the need to create a new position to handle the expanding workload.

④ New kiosks will provide convenience for truckers, increase safety on the road

Truckers will now be able to obtain required paperwork and safety information at 15 new kiosks at ports of entry. It also removes the need to create three new positions.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
	\$15,000	
	\$40,000	
	\$51,000	
	\$153,000	

Efficiency Measures

2008 forward — Division of Motor Vehicles

5 Digital image exchange program will combat identity fraud nationwide and improve service for customers

When a person from another state applies for an Idaho driver license, the complete driver record from that state will now be available for verification purposes. Not only will the system combat fraud, it will speed service for legitimate customers.

6 Print-on-demand license plate decals will reduce inventory, increase protection against fraud

County assessors will no longer have to stock multiple types of license plates decals when the new print-on-demand system begins. The decal will now match the license plate number—helping law enforcement prove the validity of the vehicle registration. The system will also reduce opportunities for fraud.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
		Fraud Reduction Customer Service Improvement
\$360,000	\$160,000	

Efficiency Measures

2008 forward — Division of Administration

① Further development of financial system will improve management of obligations and expenditures

Managing all contracts, agreements and other obligations in a single system is one of the next steps in the full deployment of the department's financial system. This will result in one system where obligations and expenditures are better managed.

② Intranet collaboration tools will improve efficiency and reduce e-mails

By using intranet collaboration tools, the department will share project information easier, improve efficiency, and reduce e-mail messages.

③ Using voice-over-Internet protocol for telephone communication will cut costs and improve efficiency

Costs will be reduced and functionality improved with the use of voice-over-Internet protocol in place of the department's current phone system.

④ Data warehousing initiative will speed service

Both internal and external customers will benefit from the development of a data warehouse. Requests for a wide range of information will be more quickly provided through this project.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
		Efficiency Improvement
		Efficiency Improvement
		Cost Reduction
		Customer Service Improvement

Efficiency Measures

2008 forward — Division of Transportation Planning and Programming

① Voluntary development agreement to provide additional revenue to accommodate growth
The department is considering the use of voluntary development agreements between the department and large scale developers that will have a direct impact on state highways. The purpose of the Voluntary Development Agreement is to provide additional financing for transportation improvement projects needed to reduce the demand for access and traffic-related impacts caused by future developments. The fees collected will be used to finance the transportation-improvement projects. The department, in conjunction with the developer, will plan and study the proposed development and incorporate and accommodate the needed additions to the state highway system.

② Research project will identify the best options to manage pavement condition
Keeping the pavement on the 5,000 mile state highway system in the best possible condition is one of the transportation department's highest priorities. Knowing when to work on a pavement is critical to extending its life—and investing wisely.

That's why the department is identifying the best method to update its management systems and link pavement needs, maintenance work and GIS data into one tool that compliments its financial management system. This measure will implement a pavement-management research project to evaluate current systems, identify potential software solutions, and analyze the costs and benefits.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
		Revenue Enhancement
		Process Improvement

Efficiency Measures

2008 forward — Division of Public Transportation

① Electronic procurement system will cut paperwork and time required to purchase transit vehicles
The department is exploring an electronic procurement system to purchase transit vehicles. The commitment of time and resources required from a grantee and department staff for the purchase of transit vehicles is extensive. Through the development of an e-procurement system, the department is estimating a 25 to 35 percent time savings for the employees handling vehicle procurements. Another benefit of this system is that it will greatly improve compliance with specific grant programs.

② Multi-year federal grants will cut administration time and stabilize funding
The department is actively exploring options with the Federal Transit Administration to execute multi-year grant agreements with grantees in rural and intercity public transit grant programs. This will help to reduce the amount of staff time spent on grant related administration, not only within the department but also for all rural and intercity public transit providers. The multi-year approach also allows transit providers to better plan purchases and services.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
		Paperwork Reduction Manpower Savings
		Paperwork Reduction Funding Stabilization

Efficiency Measures

2008 forward — Division of Aeronautics

① On-line flight scheduling will make state airplane a more valuable resource
 State employees wanting to schedule or check on the availability of seats on the state's airplane and calculate the costs will have an on-line system to help them. The department is researching reservation systems and will also use the tool to manage flight schedules and other records.

② Airplane search efforts will benefit from increased training
 When an airplane is lost in Idaho, the department relies on its partners with the Civil Air Patrol to conduct the aerial search. That's why it is important to conduct on-going training for these volunteers in the best search and safety procedures. The department will be developing a new training schedule and looking for additional funding sources to provide this valuable service.

③ Advertising could cut costs of Airport Facility Directory and Aviation Chart
 The department will determine whether there is interest from companies to advertise in both the Airport Facility Directory and Aviation Chart. Advertising revenues would be used to offset printing costs.

④ Providing on-line registrations for airmen, aircraft, and dealers will cut costs, improve service
 An on-line registration service for airmen, aircraft, and dealers is planned that will cut costs and improve service. In addition to registering and paying on-line, the service will also allow airmen to make critical updates to their registration data.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
		Customer Service Enhancement
		Safety Enhancement
		Revenue Enhancement
		Cost Reduction Customer Service Improvement

Efficiency Measures

2003 to 2007

Division of Highways

2003 to 2007 Efficiency Measures

① Inmates performing routine maintenance—saving an average of \$2.3 million
 Inmates from the Department of Corrections save the department \$2.3 million annually in labor costs by performing miscellaneous work on road projects. Correctional Industries charges the department \$4.25 per hour for each inmate compared to \$10.41 an hourly employee would cost. Using inmate labor keeps the department from having to hire additional hourly employees.

② Adopt-a-highway groups saving more than \$440,000 in litter pick-up costs
 Idaho's 1,100 adopt-a-highway groups and 11,000 participants save the department more than \$440,000 annually in litter pick-up costs. More than 1,800 miles of highway have been adopted.

③ Anti-icers saving \$1 million, reducing accidents, air pollution, and tort claims
 Using anti-icers to prevent snow and ice from building up on the state's highways rather than waiting to sand and plow is saving the department approximately \$1 million annually and reducing accidents. On U.S. 12, winter accidents were reduced 82 percent after this preventative strategy was implemented. Reducing reliance on sanding is also decreasing air pollution, the need for brooming the roadway and tort claims against the state for windshield damage.

④ Changing anti-icing product saving \$500,000
 Changing the anti-icing product the department spreads on the highways prior to winter storms from magnesium chloride to sodium chloride brine will save the department \$500,000 annually—with no reduction in quality.

⑤ Limiting pressure on snowplow blades saves \$30,000 in first year of pilot project
 The life of snowplow blades is being extended two to three times by installing down pressure limiters—saving one district \$30,000 in its first year of use. It is estimated the \$500 blade saver package will pay for itself a minimum of 12 times during the service life of the truck. This pilot project proved so effective all future plow trucks will be equipped with the pressure limiter.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
	\$2.3 Million	
	\$440,000	
	\$1 Million	
	\$500,000	
\$30,000	\$150,000 to \$200,000	

Division of Highways

2003 to 2007 Efficiency Measures (continued)

6 "Wing" snowplows clearing highways quicker—reducing accidents and saving time and money
The addition of wings to 61 of the department's large snowplows are allowing a single truck to plow a 12-foot lane and shoulder at the same time rather than requiring two trucks to plow in tandem. Wing plows not only save fuel and maintenance costs, they allow drivers to finish priority routes sooner and then plow secondary routes. This is providing more timely service and a safer winter driving experience while not increasing either personnel or truck complements.

7 Employee engineers improvements to department's snowplows—reducing maintenance costs and improving efficiency
Jerry Brown, a welder in the department's District 1 office, designed three snowplow improvements. Brown devised a new bumper system, mounted on the side of the snowplow box, that protects the truck box and body from being damaged each time the wing plow is raised. He also designed a swivel for the wing plows that is twice as strong as the original, at half the cost and modified the tailgates on the sanders to improve functionality.

8 Staggered, extended shifts for snowplow drivers reducing overtime and improving service
The department is scheduling its snowplow drivers to work when it makes the most sense. On Lolo Pass, overtime was eliminated and service improved when the plow drivers started working 10-hour shifts. In urban areas, drivers often work split and staggered shifts—so the highways are plowed before the morning and evening rush hours.

9 Controlling avalanches to keep Idaho 21 safe and open
The department is taking a proactive approach to controlling more than 50 avalanche chutes along the Canyon Creek area of Idaho 21. During normal winters, the stretch of highway may close up to a dozen times a year, with some closures lasting more than a week. The department is testing two methods to bring threatening snow accumulations off the mountainside before they cascade down on their own: dropping explosives from a helicopter and launching explosives from a truck mounted cannon. The department is developing an avalanche control program with these tools.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
	\$750,000	
		Cost/Efficiency Improvement
		Efficiency Improvement Customer Service Improvement
		Safety Improvement Customer Service Improvement

Division of Highways

2003 to 2007 Efficiency Measures (continued)

10 511 system helping motorists travel smart and safe
 Idaho became part of a growing network of states that uses three easily remembered digits, 511, to access information about travel conditions. The system uses emerging technology to put travel information in the hands of motorists, enabling them to make better decisions and ultimately improve safety.

11 Flashing lights on interstate onramps warn motorists of on-coming snowplows
 Motorists on interstate on-ramps in the Pocatello area are being warned of on-coming snowplows in an attempt to reduce rear-end collisions. Snowplow drivers activate the lights as they approach interchanges. This pilot project is currently being evaluated.

12 Cross training of personnel reducing need for seasonal hourly employees—insuring quality products
 The department is cross training its maintenance, construction and design personnel to reduce the need for seasonal hourly employees and insure quality. When winter storms extend maintenance personnel, construction employees can operate plows. Maintenance employees can help meet the demand in the summer by performing inspections. This cross training not only reduces the need to hire seasonal hourly employees - but insures that experienced, trained employees are performing the work.

13 Two farmable slope projects save \$24,000—benefiting the highway system and local landowners
 On slopes adjacent to new highway construction projects, the department can spend up to \$6,000 an acre to seed, fertilize, mulch and weed. By flattening slopes so that local landowners can farm them, there is no need for these steps and no costs. Farmed slopes are more stable, less likely to erode, and keep roadside ditchlines cleaner. Approximately four acres were flattened and are now in production after two projects on U.S. 95. A future project on Idaho 6 will add 28.6 acres of tillable land.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
		Safety/Travel Improvement
		Safety Improvement
		Efficiency Improvement
	\$24,000	

Division of Highways

2003 to 2007 Efficiency Measures (continued)

14 Transportation Board reduces annual rest area program by \$5 million, directs savings to improving pavement

The Idaho Transportation Board reduced the annual rest area program from \$10 million to \$5 million annually and directed the savings to pavement maintenance. The board also requested the department to seek partners in the development of new rest areas.

15 Partnering with McCammon truck stop providing rest-area services while saving \$13.5 million

When the Inkom Rest Area on Interstate 15 needed to be replaced, the department found an innovative and cost-saving solution. Rather than spending an estimated \$14 million to rebuild the north- and southbound facilities, \$380,000 was invested at a McCammon truck stop to expand the bathrooms and parking. The truck stop serves both north- and southbound motorists at the McCammon Interchange.

16 Partnering with Bonners Ferry builds visitors center and pedestrian tunnel, eliminating the need for a new highway rest area

The department and City of Bonners Ferry collaborated on a project to build a downtown visitors center that replaces the need for a new rest area. In addition, the city will own and operate the facility—eliminating the costs associated with rest area maintenance. A pedestrian underpass was also constructed to safely link the downtown business areas.

17 Rehabilitating Sheep Creek and Mineral Mountain rest areas rather than rebuilding saving \$2.3 million

The Sheep Creek and Mineral Mountain rest areas on U.S. 95 were in need of modernization. Initial plans called for their complete reconstruction at a combined price of \$3 million. Responding to the transportation board’s challenge to provide rest area services while keeping costs low, the projects were redesigned. Now, the bathroom facilities will be expanded to include a family rest room and the remaining fixtures updated with water-saving features. The key features in the original concepts were all included with this renovation to meet the needs until 2030 at an estimated cost of \$743,000.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
	\$5 Million	
\$13.5 Million	\$66,000	
\$4 Million	\$25,000	
\$2.3 Million		

Division of Highways

2003 to 2007 Efficiency Measures (continued)

18 Partnering with Idaho Nuclear Laboratory (INL) to keep highways to INL site open

Keeping the highways leading to the INL site open and ice free during winter months is a challenge. That's why the department and INL are partnering to keep the highway safe for the more than 2,500 employees who travel to the remote site each day. The INL is contributing \$217,000 annually to the department for additional maintenance during winter storms. Department trucks can also utilize the INL's sand and salt stockpiles if needed.

19 Lease for State Police headquarters in Coeur d'Alene saving \$2.5 million

The Idaho State Police needed to consolidate and upgrade their office in Coeur d'Alene, and budgeted \$2.5 million for the purchase of land. But that expense was avoided when the transportation department leased two acres of its Coeur d'Alene complex to the state police. The parcel already has power, water, and sewer hookups and hi-speed internet access available—saving even more money.

20 STAR legislation offering another innovative tool for financing highway improvements

A new tool was added in 2007 to finance highway improvement projects. The State Tax Anticipation Revenue program will compensate developers who pay for interchanges or highway improvements that access new commercial/retail complexes. A new interchange at Beck Road near Post Falls on Interstate 90 is currently being developed using this financing tool. Estimated costs for the new structure which will open that area of Post Falls to immediate development is \$35 million. On Idaho 55/Eagle Road in the Treasure Valley, another \$10 to \$15 million in improvements are being considered using the STARS tool.

21 Citizen transportation committees giving guidance and feedback

More than 350 Idaho citizens assist the department in prioritizing projects and identifying issues and solutions through regional transportation committees. The department meets regularly with more than 30 groups statewide.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
		Interagency Cooperation Customer Service Improvement
\$2.5 Million to ISP		
		Funding/Efficiency Improvement
		Public Involvement Customer Service Improvement

Division of Highways

2003 to 2007 Efficiency Measures (continued)

22 Partnering to serve history and tourism
 The transportation department understands enjoying the journey can be as important as getting to the destination. Examples include:

- accelerating U.S. 12 projects and building a Lolo Pass Visitors Center in anticipation of the 2003 Lewis and Clark Bicentennial
- accelerating projects on Interstate 15 for the 2002 Winter Olympics in Salt Lake City;
- being a funding partner in the construction of the Oregon Trail History Center near Glens Ferry and the National Oregon/California Trails Center in Montpelier;
- directing tourists with scenic byway and historical marker guides and new Oregon Trail and rest area kiosks; and
- contributing to the renovation of the Mesa Falls Backcountry Byway road surface, trails, facilities and the lodge.

23 Evaluation of District 1 grounds maintenance saving \$25,000
 Maintenance costs for the department’s District 1 complex were cut in half by using a temporary 20-hour employee rather than using a commercial contractor.

24 Dual ordering of supplies saving \$5,000 in freight charges
 The department's District 1 and 2 supply offices now collaborate on major orders, such as grader blades, to save on shipping costs.

25 In-the-field technology making employees more productive
 Cell phones, laptops, digital cameras and satellite Internet connections are keeping employees in the field and more productive. Cell phones are allowing a direct link from the contractor to department employees, saving time and money. With construction crews working nights and weekends, the cell phones have become particularly valuable in improving "after hours" communication. Laptops allow inspectors to complete paper work and where services are available, e-mail them without leaving the field. Digital images can also be e mailed to the main office for input and response. At remote department maintenance sheds, satellite Internet connections are being provided, linking inspectors and project offices.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
		Interagency Cooperation / Process Improvement Customer Service Improvement
	\$25,000	
	\$5,000	
		Efficiency Improvement

Division of Highways

2003 to 2007 Efficiency Measures (continued)

26 "Zipper" tool providing better pothole patches, cutting asphalt costs by \$85,000

Highway patches are more durable and use less asphalt through a new tool. A roto-mill Zipper machine saved the department's District 4 operation \$85,000 in asphalt costs. The machine is being considered for use statewide.

27 On-line bidding reducing errors, saving travel time

An on-line bidding tool is reducing errors in contractor's bids and eliminating the need to travel for bid openings. The tool allows only complete bids to be submitted. Apparent low bidders are posted on-line immediately after openings eliminating the need for contractors to travel to Boise or hire representatives.

28 Contractors proposing cost savings through value-engineering process

Contractors can propose cost and time saving ideas on construction projects through the department's value-engineering process. On the construction of the Karcher Interchange in Nampa, the contractor recommended a different pavement treatment and phasing approach. That suggestion saved \$55,000. In Bonners Ferry, the contractor recommended a completely different type of structure to build a pedestrian underpass. That suggestion saved \$26,000.

29 Posting specifications manuals on-line and on CDs rather than printing—saving \$500,000 annually while providing more up-to-date information

More than 30 technical manuals and guidebooks are now posted on-line and on CDs that cost only \$1 to burn and 1,300 updated CDs are provided twice a year rather than being printed. In the past ITD did not provide twice-a-year updates due to the high cost of printing. If ITD were to provide updates annually and complete reprints including binders and tabs every three years for 1,000 manuals, it would cost in excess of \$500,000 annually.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
	\$85,000	
		Process Improvement Customer Service Improvement
\$81,000		Process Improvement
	\$500,000	

Division of Highways

2003 to 2007 Efficiency Measures (continued)

30 Disputes resolution board dramatically reducing contractor claims
When there is an issue on a construction claim, the department and its contractor can use a dispute resolution board to settle it fairly and quickly without advancing to litigation. Since its inception, the number of claims advancing to the department's chief engineer for resolution dropped from 11 in 2004 to one so far in 2007.

31 Seat belt use saving lives and preventing injuries
Idaho's seat belt usage rate soared from 57 percent in 1998 to 78 percent in 2007. From 2002 to 2006, the number of serious injuries among people who were not buckled up has dropped from 612 to 384.

32 Idaho's fatality rate is lowest ever
Idaho's fatality rate dropped from 1.94 fatalities per 100 million annual vehicle miles of travel in 1998 to 1.75 in 2006, Idaho's lowest rate ever. If the fatality and injury rates had remained at 1996 levels, Idaho would have had an additional 38 fatalities, 486 serious injuries, 1,632 visible injuries, and 787 possible injuries. This equates to a cost savings to society of nearly \$345 million based on comprehensive cost estimates for collisions. However, Idaho still remains above the national average of 1.44 fatalities per 100 million annual vehicle miles of travel.

33 Rumble strips reducing head-on and run-off-the road crashes
A statewide safety rumble strip program is reducing head-on (centerline rumble strips) and run-off-the-road crashes. These types of crashes generally result in fatalities and serious injuries. This program will be evaluated on an on-going basis to determine cost effectiveness.

34 Durable pavement markings lasting longer, shining brighter
A statewide durable pavement marking program is combating the loss of lane markings as a result of winter maintenance operations. The durable pavement markings replace oil/solvent-based paints with epoxy based-pavement markings and are inlayed in a shallow groove into the existing pavement. Although the initial cost is greater, the product is much more durable than water-based paint and warranted for four years. When averaged, costs for the durable markings are about the same as annually restriping a highway.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
		Process Improvement
		Safety Improvement
	\$345 Million to society	
		Safety Improvement
		Safety/Efficiency Improvement

Division of Highways

2003 to 2007 Efficiency Measures (continued)

35 Plummer maintenance crew creates tool to remove damaged guard rail post minimizing repair time and increasing safety

Maintenance crews statewide struggle with pulling and removing damaged or broken guardrail posts. To minimize repair time and increase safety, John Reed engineered a hydraulic tool that was constructed by the Plummer maintenance crew. The tool is saving the department's District 1 Office approximately \$26,000 annually in labor and equipment costs. The tool is being considered for statewide manufacturing and use.

36 Employee's innovations improving safety

A "dipty-do" machine designed and constructed by department employee Dave Turner automated a testing program in the department's chemical lab. Using an electronic timer, a rotating plastic disc, a motor and microprocessor, Turner invented a way of dipping metal washers into a magnesium chloride solution periodically over several days. Turner also developed a device that captures cement samples without requiring climbing onto trucks and digging through extremely fine cement dust. The samples are more representative of the material going into the concrete structures.

37 Incident Response trucks aid motorists, keep traffic moving on I-84

When a vehicle is stopped on the shoulder of an interstate, studies show it can have a dramatic effect on the flow of traffic—and can quickly create congestion. That's why the department is using Incident Response trucks on I-84 in the Treasure Valley to get motorists back on the road and keep rush-hour traffic flowing. The service also reduces the time the Idaho State Police and Boise City Police spend assisting motorists. The Incident Response trucks make approximately 5,000 stops annually to offer assistance.

38 Since 2002, Idaho received \$42 million in federal redistribution funds

The department has received \$42 million in redistribution funds since 2002 to improve highways and bridges. Redistribution funds are taken from states that do not obligate all of their federal funds and given to those who have. Idaho has obligated every dollar of its federal funding since the program began in the 1950s.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
	\$26,000	Process Improvement
		Process/Efficiency Improvement
		Safety/Congestion Mitigation
		Revenue Enhancement

Division of Motor Vehicles

2003 to 2007 Efficiency Measures

① Eight on-line motor vehicle services now offered to drivers and truckers—more than 284,000 transactions made in 2006

As technology becomes more entrenched in everyday life, Idahoans expect access to on-line services that save time and expense. The department responded by developing eight on-line services with even more planned. These services also reduce walk-in customers and allow the department to keep pace with the state's historic growth in the number of licensed drivers, vehicles and trucks without adding staff. On-line services are now offered for:

- Vehicle registrations—Now offered in 20 counties. In 2006, 63,436 transactions.
- Personalized license plates—This program started in spring 2007. Plate orders through the Internet are already exceeding those placed by phone and conventional mail.
- Hazardous material endorsements—In 2006, 55 percent of the hazardous material endorsements (38,073) were acquired on-line. This eliminated the need to add two new employees.
- Full fee renewal—In 2006, 33 percent of full fee vehicles (10,642) were renewed on-line. This eliminated the need to add two new employees.
- Overlegal permits—In 2006, 18 percent of overlegal permits (13,311) were acquired on-line. This eliminated the need to add one new employee.
- International Registration Plan—In 2006, 12 percent of IRP registrations (1,890) were issued on-line. New enhancements to the service are currently underway. This eliminated the need to add one full-time and one part-time employee.
- Driver record requests for local, state, and federal government agencies—More than 90,000 records were accessed in 2006.
- Motor vehicle records for eligible subscribers—In 2006, 17,000 records were issued on-line. This eliminated the need to add one part-time employee.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
		Customer Service Improvements Efficiency Improvements
	\$80,000	
	\$80,000	
	\$40,000	
	\$60,000	
	\$360,000 to gov. agencies	
	\$20,000	

Division of Motor Vehicles

2003 to 2007 Efficiency Measures (continued)

2 Conversion to digital license plate saves production costs—reduces inventory
 Conversion to a new digital license plate process will save \$42,000 annually in material costs while saving another \$37,000 annually in inventory-storage costs. County assessors' offices will no longer need to keep an inventory of 38 different specialty license plates with the introduction of a new digital process. Plates are now produced on demand when the customer orders the plate at the assessor's office. Not only will the process reduce the investment in inventory, it will minimize the opportunity for fraud. The digital plates also allow customers who want to personalize their plates to now have six characters instead of only five to express themselves.

3 Full conversion to digital driver license allows part-time position to be transferred to assist higher workloads
 Idaho's conversion to digital driver licenses, which started in 2001, is complete. A part-time position dedicated to assisting the State Police manage the remaining inventory of old driver licenses will no longer be needed.

4 Automated driver license testing stations installed statewide—improving security and processing time while saving administrative costs
 Computerized driver license exams offer applicants convenience and instant test results. The kiosks save administrative costs at county offices and reduce the risk of fraud. This project is 100 percent federally funded.

5 Innovative thinking cuts cost of DMV project from \$3 million to \$50,000
 For more than 25 years, 16 Datapoint terminals provided the link between county offices and the department's mainframe. They predated personal computers and the Internet. Staff kept the terminals operating long past their anticipated life span, using parts that were out of production to keep the terminals—also long out of production—serving county and state offices.

A critical first step in modernizing the system was insuring the existing data was not lost. Initial estimates to stabilize the system were as high as \$3 million. In early 2006, the department implemented a \$50,000 solution to mitigate high-priority concerns. The department can now take a phased approach to increasing the reliability of the DMV systems using the cost savings from this project.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
	\$79,000	Fraud Reduction
		Technology Upgrade Process Improvement
\$1 Million federal grant		
\$2.9 Million		

Division of Administration

2003 to 2007 Efficiency Measures

① \$25 million annually invested in state highway projects—through federally approved accounting process

Idaho invests approximately \$25 million annually to state highway projects by recovering indirect costs related to federal projects. The federal dollars recovered through this process results in no additional funds. However the dollars that are freed up can be used the same as state funds without federal oversight. The department bills the Federal Highway Administration for indirect personnel, operating and other costs related to the support of federally-funded projects. The recovered funds are then invested to improve the condition of the state highway system.

② \$500,000 saved by transferring data to State Controller's Office—rather than replacing aging mainframe

Instead of replacing the department's aging mainframe computer system and data storage at an estimated cost of \$500,000, the department found an innovative solution. A new partnership with the Controller's Office eliminated the pending need to replace the department's mainframe computer - while taking advantage of unused space on the State Controller's mainframe. Software licenses and hardware costs are also shared among numerous state agencies instead of each agency purchasing its own licenses. Through this partnership, the department can also leverage the State Controller's Disaster Recovery capabilities and restore mainframe functionality in the event of a catastrophic failure.

③ On-line vendor bids saving \$50,000—improving business access

More than \$50,000 is being saved annually by posting bid documents and updates for vendors on-line—rather than printing and mailing them. Vendors also have immediate access to business opportunities with the department as soon as they are posted.

④ System eliminates duplicate financial entries—allowing three positions to shift to highways

Three positions were transferred to the Division of Highways after duplicate entries and reconciliations among accounting systems were eliminated with the implementation of the department's financial management system.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
		Revenue Enhancement
\$500,000		
	\$50,000	
		Process Improvement

Division of Administration

2003 to 2007 Efficiency Measures (continued)

5 Idaho first in nation to establish electronic billing for federal safety funds—improving cash flow and paying vendors sooner

Idaho is the first state in the nation to establish an electronic billing system to receive reimbursement quicker and pay vendors sooner to support federal safety programs.

6 On-line time sheets reducing errors—cutting need for two part-time positions

Employees now enter and process their timesheets electronically, reducing errors, cutting the administrative time required to process them, and eliminating the need to store the old paper copies. Two part-time positions were eliminated saving \$40,000 annually.

7 Transportation news now electronically delivered daily—saving costs and eliminating a part-time position

National, regional, and statewide transportation news is now electronically delivered daily saving over \$45,000 annually through the elimination of a part-time position, printing and other associated costs.

8 Inventive solution connects organ donors with recipients quicker

Callie Wrigley developed an inventive electronic solution that reduced the time organ donors are registered from one month to 72 hours, potentially saving lives by connecting recipients with organ gifts much faster. Her solution also reduced postage costs by \$1,500 annually for the department and state employee and volunteer time. She was recognized nationally for her idea which is serving as a model for other states.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
		Service/Process Improvement
	\$40,000	
	\$45,000	
	\$1,500	

Division of Transportation Planning and Programming

2003 to 2007 Efficiency Measures

① Detailed maps now available through web site—increasing customer service and saving \$2,000 annually in paper and distribution costs

More than 9,000 detailed maps of Idaho are now available through the department's web site, providing both current and historic data.

② Traffic data reports available on web site—saving \$3,200 annually

Planning reports are now available through the web site—saving \$3,200 annually in printing and distribution costs. Having the traffic information reports on-line also gives the customer access to latest information when it is needed most. There are thousands of reports available.

③ Digitized video log allows employees to view entire state highway system from their desktop computers—saving travel time and money

When a section of highway is being discussed, it can now be viewed from an employee's desktop. The department has long maintained a video log of the state's highway system, but access to the taped archive was limited. By digitizing the log, now employees statewide can access the tool while making decisions—often eliminating the need to travel to the site.

④ Research consolidation effort saves \$59,000—funds moved to highways

Beginning in 2006, staff worked with several other states to recover national transportation research projects funded with monies pooled by the interested states. As a result of the new policy, older projects are being closed out and monies are being returned to participating states. For Fiscal Year 2007, the department recovered \$59,020 from seven closed projects for expenditure on pressing highway needs in Idaho. This efficiency will be ongoing in nature as more projects are closed out and monies are returned to Idaho.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
	\$2,000	
	\$3,200	
		Efficiency Improvement
\$59,020		

Division of Public Transportation

2003 to 2007 Efficiency Measures

① Partnering extends public transportation options in Kootenai County

Public transportation options improved significantly in northern Idaho when the department joined Kootenai County, the Kootenai Metropolitan Planning Organization and the Coeur d'Alene Tribe in extending a daily fixed-route service known as CityLink to the rapidly growing urbanized area. The Coeur d'Alene Tribe will complete the service from De Smet, Tensed, and Plummer to Worley and points north. Regularly scheduled service in Coeur d'Alene urbanized area also expanded to include Hayden and Post Falls. This is the first partnership in the nation among a tribe and local/state governments.

② Vehicle Investment Program expands public transportation options

The state-funded Vehicle Investment Program provided additional capital money for transit vehicles during the year. By combining federal, local, and state funds, Idaho purchased eight buses and five vans for grantees in FY 2007. The program encourages rural and intercity transportation that is especially valuable to the elderly and persons with disabilities. The program has provided 130 vehicles since its inception in 1999.

③ Two state partnership extends public transportation from Driggs to Jackson area

Beginning in April 2007, the Driggs-Teton public transportation service is now providing rides over Teton Pass into the growing Jackson Hole area. The service is a partnership among the Wyoming and Idaho transportation departments, Driggs and Teton counties, The City of Jackson Hole and START Bus. The department is assisting with funding the maintenance costs and WYDOT is funding the over the road coach bus that is used for the service. The local communities are providing the match and START Bus is providing the service.

④ Coordinating statewide purchases of public transportation vehicles saves time

The department now coordinates the purchase of approximately 20 public transportation vehicles annually saving time. Prior to providing this service, receivers of federal public transportation grants would individually purchase the vehicles. Statewide purchases will create even more time savings in the future as the process becomes more electronic.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
		Interagency Cooperation Customer Service Improvement
		Customer Service Improvement
		Customer Service Improvement Interagency Cooperation
		Efficiency Improvement

Division of Aeronautics

2003 to 2007 Efficiency Measures

1 Volunteer groups saving \$5,500 annually by performing maintenance on state's backcountry airstrips

Volunteer groups across the state donate an average of 500 hours annually to maintaining the state's network of backcountry airstrips saving the state a minimum of \$5,500 annually.

2 Business manager function combined with another division

The Division of Aeronautics and Division of Administration combined their business manager functions. The vacant full time position is currently being evaluated on where and how it could be best used within the department.

3 Publishing Airport Facility Directory on-line saving \$5,000 annually

A valuable tool for pilots is now being published on-line—giving better access to the information and saving printing costs. The Idaho Airport Directory was previously printed at a cost of \$4 a copy.

4 Printing costs of newsletter offset with advertising—saving \$2,500 annually

The cost of printing the division's newsletter, *The Rudder Fludder*, is now being offset with advertising revenue—saving \$2,500 annually.

5 Rimrock High School students learning valuable skills while cutting costs for department

Students at Rimrock High School are learning both carpentry and business skills while lowering costs for the department and Idaho's airports. Commercial outlets were charging the department \$575 for lighted windsock frames and \$375 for unlighted frames. Now the students produce the lighted frames for \$250 and unlighted frames for \$200. The agreement also helps fund the program at the school.

6 Contract lowers price for aviation fuel—saving \$19,000 annually

The department entered into an agreement to purchase aviation fuel at a lowered contract rate—rather than at a retail price. The contract is saving \$19,000 annually.

One-Time Savings	On-Going Savings	Other Outcome / Purpose
	\$5,500	
		Efficiency Improvement
	\$5,000	
	\$2,500	
	\$825	
	\$19,000	

International, National, and State Awards/Recognition

International, National, and State Awards/Recognition

Special recognition and honors from professional organizations validate the Idaho Transportation Department’s commitment to quality in both products and services. The following were among the department’s honors during the last three years:

International

- AAMVA: “Yes! Idaho, Best Brochure” for promoting participation in an organ donation registry
- AAMVA: “Face in the Windshield,” promotion of highway safety, use of seat belts
- AAMVA: Customer-service award presented to David Metcalf

National

- Reason Foundation: 10th most efficient highway system in the nation, 2007
- AASHTO: 2007 President’s Transportation Award: Henrys Lake Fish Passages
- AASHTO: ITD Visioning Process, Idaho’s Transportation Future: Getting There Together, Best Practices in Smart Growth
- AASHTO: Celebrate the Interstate, photo of completion of Interstate 90
- AASHTO: Governor’s Highway Safety Association’s Peter K. O’Rourke Special Achievement Award
- American Association of State Highway and Transportation Officers (AASHTO): The Transporter, internal employee newsletter
- Federal Highway Administration (FHWA): Photography Close-up, first place
- FHWA: Photography, Native Species, first place
- FHWA: Photography, Invasive Plants, third place
- NTPAW: Television Commercial or PSA, with Consultant
- FHWA and the Roadway Safety Foundation: Roadway Safety Award for innovative software programs related to traffic crash data collection and sharing of safety information
- National Highway Traffic Safety Administration (Pacific Northwest Region): Margaret Goertz, ITD Headquarters, certificate for assisting Alaska DOT with financial management
- National Society of Professional Engineers: Steven Loop, Headquarters, Materials Section, 2005 Fellow Award
- American Concrete Pavement Association: District 4, I-84 – Glenns Ferry to King Hill, in the Divided Highways-Rural in the National Pavement Awards Program for Excellence in Concrete Pavement
- American Council of Engineering Companies (ACEC): District 6, GeoEngineers, Inc., ACEC of Idaho Engineering Excellence Award for Idaho 87 fish passage bridge project
- National Federation of Press Women: Annual Report, Cathy Koon, report to district legislators,
- National Transportation Public Affairs Workshop: Internal Video PSA, 511 Traveler Services campaign, 30-second television spot, first place
- AAMVA: Lifetime Achievement Award, former Idaho Division of Motor Vehicles Manager Moe Detmar
- AAMVA: “Yes! Idaho, Best Brochure” for promoting participation in an organ donation registry
- AAMVA: “Face in the Windshield,” promotion of highway safety, use of seat belts
- AAMVA: Star Search Award to Becky Davis for manual transcription of the Commercial Driver’s License Manual into Spanish
- AAMVA: Online Audio Driver’s Manual, The Transporter, internal employee newsletter
- AAMVA: “Taking the Scenic Route,” travel guide and brochure
- AAMVA: U.S. 95 Thorn Creek to Moscow, public involvement campaign
- AAMVA: Idaho Dealer News, external newsletter
- AAMVA: Click It! Don’t Risk It!, seat belt safety campaign
- AAMVA: Highway Safety, children’s calendar
- National Association of State Aviation Officials (NASAO) – 2007, Distinguished Service Award – Presented to Mark Young, Idaho Airport Maintenance Manager.
- Wolfe Aviation Foundation – Received a \$3,000.00 grant to develop and conduct teacher workshops.
- Association of Marketing and Communication Professionals: Platinum Award for I-84 Orchard to Gowen Public Hearing Guide
- Association of Marketing and Communication Professionals: Gold Award for I-15 Environmental Study brochure
- Association of Marketing and Communication Professionals: Gold Award for I-84 Karcher Interchange to Five Mile brochure

Idaho

- American Society of Civil Engineers, Southern Idaho Chapter: Outstanding Civil Engineering Achievement Award: WYE Interchange Stage 1 and 2
- Idaho Society of Professional Land Surveyors: Rayce Ruiz, District 6, Professional Land Surveyor of the Year
- Idaho Division of Tourism: Idaho Visitor Center of the Year, Idaho Transportation Department and the Clearwater National Forest, Lolo Pass Visitor Center & Rest Area,
- Idaho Press Club: Internal newsletters, The Transporter, first place, public relations division
- Idaho Press Club: Publicity Campaign, 511 Traveler Services, first place, public relations division
- Idaho Press Club: ITD Annual Report, Publications, Annual Report, second place, public relations division
- Idaho Press Club: Feature Writing, ITD Public Affairs Office, second place, public relations division
- Idaho Press Club: News Releases, third place, public relations division
- Idaho Press Club: Media Campaign, Connecting Idaho bill signing tour, third place, public relations division
- State of Idaho Employee Recognition Award: Efficiency/innovation award, Jerry Brown, District, manufacturing of snowplow component
- American Society of Civil Engineers, Southern Idaho Chapter: Outstanding Civil Engineering Achievement Award: WYE Interchange Stage 1 and 2
- Idaho Army National Guard and the National Committee for Employer Support: Public Employer Award, Idaho Transportation Department
- Idaho Business Review: Top Projects, WYE Interchange, Stage 2
- Idaho State Police: Special Appreciation Award, District 6, partnership on work zone safety
- Idaho Press Club: Public Relations Web site (special purpose), XTRA4.com, educational site for teen-age drivers, first place
- Idaho Press Club: Public Relations Feature Writing, first place
- Idaho Press Club: Public Relations News Releases, first place
- Idaho Press Club: Web site, General Excellence, Public Relations, ITD Web site, third place
- Idaho Press Club: Public Relations Feature Writing, third place
- Idaho Press Club: Public Relations Internal Newsletter, District 6 newsletter Six Bits, third place
- Idaho Press Club: Public Relations Media Campaign, U.S. 95, Thorn Creek Road to Moscow, public involvement campaign, third place
- Information Technology Resource Management Council: Innovative technology-based initiative, ITD Web site design

Acronyms:

AASHTO—American Association of State Highway and Transportation Officers
AAMVA—American Association of Motor Vehicle Administrators
FHWA—Federal Highway Administration
NTPAW—National Transportation Public Affairs Workshop

Appendix

ITD Efficiency Close-Out Report 1994 to 2003

ITD Efficiency Close-Out Report

—1994 to 2003 —

EFFICIENCY MEASURE	ACTION TAKEN	ONE-TIME SAVINGS	ON-GOING SAVINGS	DATE COMPLETED
ADMINISTRATION				
BLDG & GROUNDS MTCE	Some mowing and other maintenance work is now performed by temporary employees. Fertilizing and spraying are now contracted.	\$0	\$23,300	8/1/95
INTEGRATED FINANCIAL SYSTEM	Implemented the Integrated Financial Management System.	\$0	\$0	1-1-98
RESTRUCTURE INFORMATION SERVICES	Implemented a high-speed, high-capacity network connecting and automating all major department offices and installed a new data management platform for improved efficiency. The migration to client/server continues to provide benefits in sharing data among department work groups.	\$0	\$128,800	1/1/98
IMAGING	Improved gains in production by using imaging technology to capture documents. We now have the ability to edit and maintain quality control during the process.	\$0	\$11,000	6/30/00
VIDEO NEWS CLIPPING SERVICE	Began providing video news clipping services in-house. With the procurement of four VCRs, a roof antenna, and cabling this improved function can now be performed for the cost of blank tapes. We used to spend \$3,000 a year for the service, now it only costs about \$800 a year for video tapes.	\$0	\$2,200	5/2/01
CIVIL RIGHTS TRAINING	Civil Rights conducted 70 half-day training sessions on discrimination issues. This has the potential of saving the department legal fees to defend against lawsuits. Although the initial training was completed in May 2002, Civil Rights will continue to train new employees and provide refresher training.	\$0	\$0	5/30/02
EMERGENCY PROCEDURES	Developed emergency protocols, including the use of automatic external defibrillators for cardiac arrest, for ITD first responders. Also developed emergency phone number and bomb threat procedure cards and distributed them to all ITD personnel.	\$0	\$0	4/30/02
FINAL VOUCHER PROCESS	Streamlined the "final voucher" process in conjunction with FHWA.	\$0	\$0	10/15/02
FEDERAL REVENUE COLLECTION	Reduced federal aid project expenditures that exceed the original agreement from \$8 to \$10 million to approximately \$1 million by implementing better reporting over the past four years. This has increased the timeliness of federal reimbursements and increased interest revenue of approximately \$350,000 annually. Developed a federal indirect cost allocation plan and received approval from FHWA on both the methodology and the rate. The indirect cost rate for Fiscal Year 2004 was 16.85% of total direct costs. Recovered \$25 million through indirect costs in FY04. The rate for FY 2005 is 15.01%.	\$0	\$0	9/1/03
BUILDING PROJECT BIDS	Began processing building project bids through Supply Services. This is more efficient than the previous process of the Roadway Design section preparing the bids. Roadway Design is now able to concentrate on highway projects.	\$0	\$0	7/1/01
REDUCE BID TIME	Increased ITD's purchasing authority from \$10,000 to \$50,000. It takes the Division of Purchasing four to five weeks to bid something. We can usually have it bid and evaluated within a few days.	\$0	\$0	10/1/02
MAIL SORTING AND PROCESSING	Reduced the number of records retained in Central Files, which created a corresponding reduction in workload. Re-engineered mail routes to save time and still provide good service.	\$0	\$0	8/1/02
REDUCE PHYSICAL INVENTORY	Increased the minimum equipment inventory item value from \$300 to \$1,000. This saves many man hours throughout the department previously spent maintaining the inventory. The fixed asset inventory was decreased by approximately 50%.	\$0	\$0	
VOICE & DATA CONSOLIDATION	Developed a five-year plan to better leverage our resources (both staff and dollars) to achieve ITD's current and future communication needs. The voice and data staff have been combined into the Network Services Unit in Information Services.	\$0	\$0	7/1/03
ENHANCE COMMUNICATION NETWORK	Negotiated right-of-way contracts with Touch America and Syringa Networks that allow them to install fiber-optic cable in the interstate right-of-ways. The combined value of the I-90 and I-84 contract with Touch America and Syringa are \$153,000. The savings will be used to enhance ITD's communication network. Worked with ITD and Ada County Highway District to install fiber optic communication access in Ada County. This access will provide broadband connectivity speeds between ISP Meridian, ITD, ACHD, CMFONI, IDANET and several state agencies in Boise. Future connections to Ada County offices, DMV offices and Homeland Security at Gowen Field are in the planning stages. Partnered with ISP, Judicial, Juvenile Corrections (IDJC) and the Secretary of State's Office consolidating communication resources at the 44 county seats. Extended 45 megabit ATM access to ISU to provide educational opportunities to rural communities.	\$0	\$0	7/1/04

INFO SERVICES EFFICIENCY AUDIT	Awarded a contract for \$130,000 to Dye Management to perform an in-depth study of Information Services. The report recommends ways to improve customer service, examine workloads, and how to get the most efficient use out of our existing IS resources through cross training, organizational changes, outsourcing options, etc. It identifies areas of excellence and the areas that we can improve. The recommendations will be considered as ITD implements changes through the IT transition process.	\$0	\$0	10/15/03
BLOCK INAPPROPRIATE INTERNET ACCESS	Purchased a web Inspector to monitor and block inappropriate Internet access as defined by ITD management and the computer use policy. The use of the software and policy provide the following benefits: Internet Usage can be controlled based on policy and management directive. It helps us to guard the network from potentially harmful or dangerous internet sites and virus attacks. Protects the Department from potential civil rights violations, legal liability or negative publicity. Saves network bandwidth and resources from inappropriate usage. Reduces lost productivity caused by accessing inappropriate web sites. Provides a means for reporting on various types and amount of Internet usage.	\$0	\$0	12/30/01
CENTRALIZE COUNTY SERVERS	Consolidated the six county servers onto two servers, one for the North and one for the South. This reduce costs and resources required to support the system. Centralizing the servers eliminated troubleshooting over the phone, and reduced the amount of in-state travel required to upgrade and support the servers. Without the consolidation, additional resources would have been needed. The savings were used for other infrastructure improvements.	\$0	\$0	6/30/02
CENTRALIZE EMAIL SERVERS	Consolidated e-mail onto two servers in the IS computer room and clustered them together to provide fail-over capabilities. This reduced costs and resources required to support the system.	\$0	\$0	4/30/02
AUTOMATE BACKUPS	Purchased and installed a virtual tape hardware and software system that allowed us to automate the IBM backup process and do incremental backups of the changed data. This reduced the amount of operator intervention required for backing up the mainframe.	\$0	\$0	4/5/07
DATABASE SUPPORT	Increased the Database Support Teams efficiency and productivity through training and cross training. Previously the staff supported one platform and one database management system. Now placing increased emphasis on commercial off-the-shelf software and outsourced solutions.	\$0	\$0	3/1/07
CONVERT IT CONTRACTORS TO FTPs	Created two positions to replace the full-time contractors who were providing the UNIX system administration and database administration for the Oracle Integrated Financial Management System (IFMS). The contract positions were previously costing ITD approximately \$320,000 per year. The estimated ongoing savings are \$198,300 per year.	\$0	\$198,300	12/30/02
PRINT SHOP	Implemented new technology to increase production and customer service. The new Xerox system gave us the flexibility to re-engineer our processes. Also upgraded to a more efficient Pitney Bowes high-volume, five-position, envelope-stuffing system and leased two Xerox Docutech high-speed printing systems.	\$0	\$15,800	6/1/01
WORD PROCESSING SERVICE CENTER	Realigned functions to streamline document production and records management processes.	\$0	\$61,600	6/1/01
BUILDING DESIGN	Standardized sand shed designs to provide low-cost plans for efficient sanding/antiskid materials shelters that allow loading of material in one-third of the time with less wasted materials. The standardized design allows the department to design, bid, build, and occupy sheds in record time with lower bid prices. Implemented Auto CADD standardized designs for the new maintenance shops to reduce the amount of time required to produce bid construction documents.	\$0	\$0	6/30/97
PLANNING				
TRAFFIC VOLUME COUNTERS	Increased the number of traffic-volume counters for each field person to improve time and equipment-usage efficiency.	\$0	\$0	7/1/04
TRAFFIC SENSING DEVICES	Transferred the installation of traffic-sensing devices to private contractors. This has proven to be more cost effective.	\$0	\$0	7/1/04
DATA COLLECTION CONSOLIDATION	Consolidated data-collection functions into one section to improve efficiency.	\$0	\$0	3/1/07
WEIGH IN MOTION (WIM)	Implemented new weigh-in-motion technology to collect data more efficiently.	\$0	\$49,400	3/1/07
REPAIR/MTCE/INSTALLATION	Will not be privatized, continue to re-engineer.	\$0	\$0	7/1/04
VISUAL DISTRESS PAVEMENT RATING	Combined several data-gathering functions into one vehicle to improve efficiency.	\$6,000	\$0	12/1/98
VIDEO LOG	Combined several data-gathering functions into one vehicle to improve efficiency.	\$65,000	\$0	12/1/98
LOCAL ROAD INVENTORY	Evaluated methods for self-certification by local jurisdictions for the local road inventory program. Moved the local road inventory program to the GIS Section to better align skills for in-office support for self-certification. Stopped all field-data collection	\$0	\$65,000	3/1/07
RAIL	Re-engineered processes allowing the department to begin doing many of the additional activities associated with the designation of three new urbanized areas in Idaho. The rail planner now has the additional responsibility of corridor planning.	\$0	\$0	3/1/07
INTERMODAL CONSOLIDATION	Improved communications between the Planning Division and the district planners.	\$0	\$0	3/1/07
DMV				
DATA ENTRY (TITLES)	Began utilizing three part-time positions to handle the volume increase in title transactions. These positions prepare title documents for filming and filing.	\$0	\$20,850	1/1/02
DATA ENTRY OF TITLES BY DEALERS	Implemented a pilot in Ada County for five dealers. The pilot ended in June 2004 and there are now 10 dealers participating in Ada County. This program is now being offered as a pilot in Canyon County with three participating dealers. This service is provided by a third party vendor.	\$0	\$0	6/30/04

REGISTRATION RENEWALS	Implemented an Internet registration renewal program to improve customer service options, and decrease traffic in DMV offices. The on-line registration-renewal program has been adopted by 20 counties. Usage rates in Ada County show 15% of eligible renewals are performed via the Internet. 2006 statewide statistics recorded over 63,000 renewal transactions on the Internet. Credential renewal for commercial/non-commercial vehicles is also offered via the Internet. As of Dec. 31, 2006, there was 33% increase in Internet renewals for full fee vehicle credentials from the previous year. Additionally, Hazardous Material credentials via the Internet increased by 31% from the previous year. Overlegal Permit credentials via the Internet increased by 23% from the previous year. This service has been accepted by customers and counties who appreciate its efficiency and ease of use.	\$0	\$0	7/1/03
SR-22/SR-26 ONLINE APPLICATION	Implemented an online SR-22/SR-26 program to allow insurance companies to submit SR22/26 information electronically. By the end of 2008, most insurance companies will be using the service.	\$0	\$0	9/15/04
DMV CUSTOMER SERVICE IMPROVEMENT	Drafted legislation that was later enacted, allowing the department to send notification of department actions such as driver license suspensions, and registrations/title cancellations via regular first class mail instead of via certified mail. This provides an approximate savings of \$4 per letter on approximately 70,000 letters annually.	\$0	\$240,000	6/30/03
PROVIDE RECORDS	Began providing driver records through the Internet via Access Idaho.	\$0	\$20,862	12/1/02
MOTOR CARRIER AUDITORS	Transferred the Audit Unit to the State Tax Commission.	\$0	\$88,730	1/1/98
DMV WORK AT HOME	Implemented a temporary work-at-home pilot program.	\$0	\$0	3/1/07
POE AUTOMATION	Improved the POE transponder database to improve quality of active transponder information submitted on a daily basis to East Boise and Lewiston AVI/WIM stations. There are currently approximately 27,800 transponders in Idaho's transponder database that are receiving bypass capability for vehicles that meet proper credential and size/weight limits.	\$0	\$0	7/1/04
REDUCE ROVERS/FIXED PORTS	Improved services and enforcement presence on U.S. 93 to address increased truck traffic. The ITD enforcement presence at this location saves the state approximately \$202,000 annually in damage to roads and bridges attributable to overweight commercial motor vehicles.	\$0	\$202,000	10/31/04
HIGHWAYS				
QUALITY ASSURANCE/QUALITY CONTROL	Incorporated Quality Assurance/Quality Control procedures into all projects in the construction program.			12/1/99
CROSS TRAIN EMPLOYEES	Continue to cross train employees.	\$571,583	\$400,000	12/1/00
MATERIALS LAB-PRIVATIZE (COMB D-3)	Streamlined functions of the two materials laboratories and eliminated duplicate functions where possible. Federal law requires the department to have two separate facilities.	\$0	\$80,000	3/1/07
EQUIPMENT COMPLEMENT	Established an Equipment Revolving Fund to promote a reduction in the equipment complement by eliminating low-usage equipment, which will now be rented from the private sector rather than owned by the department.			12/1/00
PARTNER WITH COUNTIES	Continued to partner with counties for weed control. Other opportunities for partnering are being pursued as they are identified, including the construction of turn bays, intersections and other safety work. ITD has 32 active cooperative weed agreements with counties for a total amount of \$122,000. There are also 4 districts that have contracts for weed spraying totaling \$484,000.	\$0	\$0	12/1/02
WEED CONTROL W/LCL/PRIV	Continued to contract out weed control and to partner with counties. However, ITD weed control crews have not been eliminated.	\$0	\$52,000	12/1/00
CUT MOTORPOOL	There have been no further cuts to the motor pool since 1998. The motor pool has not grown.	\$165,069	\$0	6/1/99
CONSULTANT DESIGN	Contracted over half of preliminary engineering work to private consultants. Continued to utilize private contractors for construction engineering and inspection work. For the last four years, State staff has remained consistent even though workload has increased significantly.	\$0	\$0	1/1/98
PROFILE/ASSESSMENT	Combined the video-logging function with roughness assessment in the same vehicle.	\$0	\$0	6/1/04
FALLING WT DEFLECTOMETER	No change in status. There is no equipment available for performing the volumes of ITD work. Costs for consultants are excessive due to specialized equipment required.	\$0	\$0	3/1/07
SKID RESISTANCE TESTING	No change in status. There is no readily available equipment. Costs for out of state consultant equipment, if available, would be excessive.	\$0	\$0	3/1/07
ACCIDENT RECORDS	Re-engineered the grant process. Hired two temporary grant/contract officers to address the increased workload. Completed a study to privatize the Research Data Tech position. No cost savings were identified.	\$0	\$0	4/1/97
BRIDGE INSPECTION	Private consultants now perform 43% of all bridge inspection work. ITD performs the remaining inspections work at approximately 60% of the cost of consultants.	\$480,000	\$0	12/1/95

ROW APPRAISAL, NEGOTIATION, DISPOSAL	Contracted with private contractors to perform appraisals and title clearance work. Between June 30, 2006 and July 1, 2007, 2,905 appraisals were completed with 70% being performed by fee appraisers. Contracted with private title companies for title insurance, escrow clearance, and deed recording for 1,631 acquired parcels. Through proactive property management, ITD has sold or traded 145 parcels of surplus land generating \$6,422,140 in revenue. During the past ten years 70% of the 2,401 appraisals required by ITD were accomplished by private sector appraisers. Title insurance, recording, and escrow clearance was accomplished by private title companies for the 1,546 parcels of land acquired by ITD during the last ten years. When more than one land title company does business in a county, ITD procures this work on a competitive bid basis. Since 1996 ITD has sold or traded 255 parcels of surplus land which generated \$14,120,659 in revenue.	\$0	\$0	1/1/98
REDUCTION OF TRUCK FLEET	Completed the conversion of the truck fleet from a majority of single-axle trucks to a majority of tandem-axle trucks, which allowed the size of the fleet to be reduced because tandem axle trucks can plow and sand more lane miles than single axle trucks in the same amount of time.	\$0	\$0	6/1/99
EQUIPMENT BUY BACK PROGRAM	Purchased 102 pieces of large equipment (loaders, backhoe/loaders, and tractor trucks) utilizing the vendor buy-back method. For calendar year 2007 the buy-back program will save ITD \$492,972 in depreciation expenses alone. An average of \$300,000 per year is estimated as on-going savings. This does not include savings associated with the elimination of maintenance costs since the equipment purchased with a buy-back contract is under warranty for the duration of the buy-back period.	\$2,035,549	\$300,000	3/1/07
DISPATCH USING STATE COM	Contracted with the State Communications Center to provide dispatch services previously provided by district personnel.	\$0	\$0	7/1/97
WINTER MAINTENANCE	Implemented the use of anti-icing chemicals as another tool to help with winter highway maintenance operations. In certain areas of the state this has reduced the amount of overtime worked and amount of sand used due to the proactive approach of using anti-icing chemicals before storms hit. The use of anti-icing chemicals has resulted in higher level of service to the public due to highways being maintained in a wet condition rather than snow or ice covered for longer periods of time.	\$0	\$0	11/1/00
STRIPING	Contracted with private contractors to perform all Interstate striping work.	\$340,000	\$55,000	3/1/07
CONVERT MANUALS TO CDs	Converted nine manuals, 10 guide books, and two training tutorials to electronic distribution on CD rather than printing hard copies. This has generated savings of \$135,000 per year in publication costs.	\$0	\$135,000	12/13/02
MOWING	Continue to have private contractors perform mowing statewide. This allows district personnel to perform other higher-priority work. The percentage of contract mowing has continued to grow each year since it was started in 1996. As more mowing is contracted, districts are able to eliminate mowers from their complement. Districts will need to maintain a limited number of mowers to handle special mowing situations and emergencies to clear up sight distance or other vegetation-related problems.	\$0	\$0	12/1/02
SIGNALIZATION/ELECTRICAL	Modified the contract specifications for traffic signal cabinets to include equipment for relatively simple intersection control. In cases where this equipment can be used, it saves \$3,700 per unit.	\$44,000		5/1/98
SIGNING	Contracted with Correctional Industries and commercial sign companies to provide signs.	\$0	\$20,000	11/1/97
SHOP MTCE/SERVICE STATION	Maintained the employee complement for the six division maintenance shops and the headquarters garage at the 1997 level.	\$0	\$0	6/1/97
EQUIP LEASE VS. PURCHASE	Evaluated several lease-versus-purchase options for multiple types of equipment. In all analysis, purchasing equipment in lieu of leasing provides the lowest hourly cost of ownership and operation. However, the equipment evaluated all had a high degree of utilization. As the Equipment Revolving Fund (ERF) comes on-line, district equipment managers will begin to evaluate low-utilization types of equipment to determine whether leasing or renting will be more cost effective. There are currently no long-term leases, but districts are using rental equipment for specific short-term needs in lieu of purchasing the equipment.	\$0	\$0	7/1/02
AERONAUTICS				
AIRPORT/AIRCRAFT MTCE	Employed a full-time mechanic to perform aircraft maintenance. This enables Aeronautics to do the vast majority of work in-house for less money than a private company. When the division is under a time constraint or does not have the proper tools, work is done by a contractor. Division employees perform airport maintenance, except in cases where travel distance makes it not feasible. In those cases maintenance activities such as mowing and fertilizing are done by local people. The division continues to monitor costs and make decisions regarding the most efficient use of funds. It does not appear feasible or desirable to move forward with privatization of state airport maintenance.	\$0	\$0	12/1/02
DOWNSIZE AIRCRAFT POOL	Not feasible. The King Air has been in service since March, 1999. The Navajo continued to be a valuable asset to the air pool and was used by agencies for short haul trips, but the aircraft was destroyed in an accident in 2002. The King Air is the only all-weather twin engine aircraft currently in the air pool. The Cessna 182 and Cessna 206 are utilized by Fish and Game and other agencies for backcountry work.	\$0	\$0	3/1/02

IMPROVEMENT OF AIRPORTS	Conducted a passenger-demand study, and worked closely with the Department of Commerce to develop measures designed to attract commercial air service to airports other than Boise.	\$0	\$0	7/1/03
IMPROVEMENTS TO AIRPORTS	Analyzed aircraft data to determine which airports are busiest. This will enable the division to determine where airport maintenance money would best be spent.	\$0	\$0	9/1/04
AVIATION SAFETY	Continued to conduct ongoing pilot-safety classes throughout the state. Purchased and installed a new search and rescue software system. Trained staff in the use of the software that enables quicker identification of the last-known position of missing aircraft.	\$0	\$0	7/4/02
PUBLIC TRANSPORTATION				
RURAL TRANSPORTATION TRAINING	Privatized the training program in 1996. Discontinued privatized training in 2001 in favor of providing more efficient in-house	\$0	\$0	4/1/01
RECIPIENT OPERATING SUB SYSTEM	Completed an upgrade to file reimbursement requests electronically, which improved efficiency and eliminated coding and data-entry errors.	\$0	\$0	7/1/02



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